

SHRINES OF THE PASIÓN-VERAPAZ REGION, GUATEMALA: RITUAL AND  
EXCHANGE ALONG AN ANCIENT TRADE ROUTE

By

Brent Kerry Skoy Woodfill

Dissertation

Submitted to the Faculty of the  
Graduate School of Vanderbilt University  
in partial fulfillment of the requirements

for the degree of

DOCTOR OF PHILOSOPHY

in

Anthropology

August, 2007

Nashville, Tennessee

Approved:

Dr. Arthur A. Demarest

Dr. Edward F. Fischer

Dr. Ronald L. Bishop

Dr. Pierre Robert Colas

Dr. John W. Janusek

Dr. James E. Brady

Copyright © 2007 by Brent Kerry Skoy Woodfill  
All Right Reserved

## DEDICATION

To my mother, Constance Marie Skoy

## ACKNOWLEDGEMENTS

Writing a dissertation is never an individual effort, and I feel honored to have had so many people helping me in every stage of the writing process. I would first like to thank my dissertation committee—Arthur Demarest, Ron Bishop, Jim Brady, Ted Fischer, John Janusek, and Pierre Robert Colas. Every member brought a very different perspective to this work, and helped to make the text well-rounded and, hopefully, interesting to people from as varied a background as they are.

I had the help of a great many people in the field—Mirza Monterroso, Jon Spenard, Nic Miller, Margaret Tarpley, Amalia Kenward, Emelia Gazzuolo, Matt Oliphant, Nancy Pistole, Paul Halacy, Tomás de la Cruz, Álvaro Ramírez, Matt Aires, Carlos Girón, Jose Hurtado, Claudita Arriaza, Adriana Segura, and all of the workers from La Caoba Vieja, El Zapote, La Union, Mucbilha, Candelaria Campo Santo, Por Venir II, and Raxruha. Leonidas Javier opened his *finca* to me on multiple occasions, and provided a little bit of paradise while investigating Hun Nal Ye.

I'd like to thank the communities of La Caoba, Mucbilha, and Candelaria Campo Santo, as well as the members of Daniel Dreux and Sergio Sierra's hotel, all of whom graciously allowed me to perform my investigations, even if it took them a while to believe that I was actually crazy enough to spend large amounts of time in caves without actually looking for treasure to sell. Dr. Amilcar Bojorges also opened his *finca* to me for the investigation of several of the caves in the Candelaria system and La Lima. He helped in countless other ways—providing hotel rooms, inner tubes, good company, and, occasionally, a large television to watch the Mundial.



Lupe's *tienda* in Raxruha recharged me physically and emotionally, and I have many fond memories of enjoying a cold Gallo, warm *chicharrones*, and good company there.

Walter Burgos, Mirza Monterroso and Güicho Luin have proven invaluable in the field and lab as “on call” artists, no matter how dangerous the cave or how complicated the sherd. They were invaluable assets in the laboratory as well, as were Julio Cocom, Joel López, and Paola Hurtado.

My wife, Mirza Monterroso, has been an essential part of this process. She has been my partner in the field and lab since 2004 and her hand is in much of this dissertation—she is responsible for the majority of the drawings, analyzed many of the artifacts, and helped to investigate many of the sites. Many of the ideas here are based on conversations we have had about the material. Some of the happiest days of my life were spent with her in the Candelaria Caves and Hun Nal Ye, and she was the only thing that got me through the analysis of obsidian and chert.

Jon Spenard has been a friend, colleague, and confidant of mine since we began field school in Belize in 1998, and he has been an important part of this research, continuing the investigations in the San Francisco Hills and serving as a “pinch hitter” whenever needed, be it mapping, digging, or squeezing into the tiniest holes.

Erin Sears has helped to keep me sane, healthy, and comfortable since I first visited Cancuen in 2000. Thank you for all of your support and encouragement over the years! Duncan Cook and Erin Thornton have been a pleasure to work with in the field and laboratory as well.

I was fortunate to have had many people who know much more than I help me identify my material: Ron Bishop, James Blackman, Marian Hatch, Antonia Foias, Dorie Reents, Geoff Braswell, Don Forsyth, Juan Pedro Laporte, Takeshi Inomata, Kazuo Aoyama, Melanie Forné, Edgar Carpio, Federico Fahsen, Oswaldo Chinchilla, Pepe Paredes, Luís Romero, Erin Sears, Duncan Cook, Claudia Wolley, Erin Thornton, and Arthur Demarest. Jeanette Castellanos spent several months with me teaching me how to conduct ceramic analysis, and Juan Pedro Laporte opened up his laboratory in Dolores to me and helped me sort out much that I was confused about, especially the Early Classic material.

Patricia Carot performed the first archaeological investigation of the caves in the region in the 1970s, and she graciously met with me in Mexico City and allowed me to review and photocopy her master's thesis, field notes, photographs, and collected articles. Correspondence with Carot and Brian Dillon have helped to guide present and future research in the Candelaria Caves and surrounding areas. In addition, I received much help and advice over email with T. Patrick Culbert, especially concerning the Early Classic ceramic material.

The field and lab work would not have been possible, of course, without the support of the Ministry of Culture in Guatemala and everyone there who has gone out of their way to help me. I would like to thank especially Nora López, Yvonne Putzeys, Boris Águilar, Hugo Barrera, Paulino Morales, Jorge Mario Ortiz, Sergio Ericastilla, Francia Monzón, and Francisco Paniagua. Salvador López helped with permits and connections, and he brought me into the investigation of Hun Nal Ye, for which I will always be grateful.

I received invaluable support from Vanderbilt University, Proyecto Cancuen, the Ahau Foundation, the Foundation for the Advancement of Mesoamerican Studies, Incorporated; the United States Agency for International Development; Chemonics, Incorporated; and Fortalecimiento Institucional para Politicos Ambientales. Personnel, connections, and infrastructure were provided by members of USAID, the Peace Corps, Counterpart International, National Geographic, and Idaho State University. I would like to thank Brian Rudert, Claudia Pastor, and Anne Dix (USAID); Jason Pielmeyer, Kelly Kirschner, and Curan and Michelle Bonham (Peace Corps); David García, Mario del Cid, Don Bex, and Ernesto Tzi (Counterpart International); Stephen Alvarez and Jesus López (National Geographic); and Dr. Tony Stocks (Idaho State University). The members of CEMCA, especially Anaite Galeoti, and CIRMA opened their libraries (and CEMCA's bookstore!) to me, providing me with dozens of essential books by previous projects in the region.

While writing this dissertation, I had a few people who took it upon themselves to keep me somewhat grounded in the world of the living—Mirza Monterroso, Virginia Lee Wallace, Jon Spenard, Tammy DeMaio, Sergio Romero, and my family.

My graduate career was marked by exceptional teachers and scholars—Arthur Demarest, Ted Fischer, Tom Gregor, Bill Fowler, John Janusek, Pierre Robert Colas, Beth Conklin, Francisco Estrada-Belli, Annabeth Headrick, and Norbert Ross. Allison Price, Tammy DeMaio, Laura Fleming, Norma Antillón, Carla Gifford, and Sally Miller went out of their ways to help me during the seven years I was at Vanderbilt. Brendan Bream of the geology department kindly revised the descriptions of the raw materials in Appendix A.

My fourth-grade teacher, Mrs. Leathers, introduced me to archaeology, and long before I was interested in the Maya or caves, my uncle Glenn Skoy and I spent countless hours volunteering at the Institute for Minnesota Archaeology, stopping on the way for kebabs and Pepsis at the Caspian. I'd like to thank Phyllis Messenger, Clark Dobbs, Geoff Jones, Dave Makey, Doug Birk, Kim Breaker, and the rest of the staff at the IMA and IMAC for giving me the opportunity and education needed to get started in archaeology.

My interest in caves is due in a large part to the years I spent working with Jaime Awe and other members of the Western Belize Regional Cave Survey, and I have made many friends and valuable colleagues through my work there, including Jon Spenard, Pierre Robert Colas, Dave Lee, Jenn Piel, Chris Morehart, and Carolyn Audet.

In my undergraduate career, I was fortunate to have studied under a variety of amazing scholars and teachers. I would like to thank Skip and Phyllis Messenger for introducing me to Maya archaeology. I took two trips with them to Mexico through Hamline University, and within five minutes of visiting my first Maya site I was hooked. My advisors, Jack Weatherford and Dave McCurdy, piqued my interest in cultural anthropology and provided me with the academic base that has allowed me to survive this far. I still keep in touch with Weatherford and the Messengers, and am honored to consider them my friends. They have helped to ground me and keep graduate school, which can be a bit consuming and overwhelming, in perspective.

Anne Sutherland guided me onto the Western Belize Regional Cave Project, and Arjun Guneratne introduced me to many of the classic anthropological texts that allowed

me to begin to think about the issues presented in this dissertation. Roy Kay and John Bernstein of the English Department pushed me to be a better writer and critical thinker.

Arthur Demarest brought me on board to the Cancuen Project and proved to be an ideal mentor—he was there when I needed him and left me to puzzle through things when I didn't. I have received help and support along the way from all of the members of Proyecto Cancuen, past and present, but especially Erin Sears, Marc Wolf, Tomás Barriéntos, Melanie Forné, Edy Barrios, and Federico Fahsen.

My family has supported me morally, emotionally, financially, and, at times, literally since I began graduate school in 2000. They have all kept me sane and healthy. My mother, Connie Skoy, has kept me fed, provided a plane ticket home whenever I needed it, a vehicle to get around in Guatemala, and countless other things. Regina Skoy, Glenn and Mary Skoy, Catherine and Mike Legge, and Margaret Skoy have been exceedingly generous with their time and love, and made sure I was comfortable. Graduate school is a communal effort, and every member of my family has left done their part, from visiting me in the lab and field and reminding me that there is more to life than ceramics to sending a much-needed check or pound of coffee, from flying out to Nashville and taking me to dinner to organizing the traditional family curry dinner at Taste of India. Mary Skoy and Catherine Legge have gone out of their way to edit multiple versions of this monstrosity, and if that isn't love, I'm not sure what is. Finally, I'd like to thank my grandmother, Jean Skoy, who was such a central part of my life and pushed and guided all of us in the family to go much further than we could have without her.

In spite of all of the help I have received in the research for and writing of this dissertation, any errors or inaccuracies, of course, are my sole responsibility.

## TABLE OF CONTENTS

	Page
DEDICATION .....	iii
ACKNOWLEDGMENTS .....	iv
LIST OF FIGURES .....	xv
LIST OF TABLES .....	xxiv
Chapter	
I. INTRODUCTION .....	1
The Highland-Lowland Interface.....	1
Definition of a Shrine.....	2
Thematic Overview.....	2
Theoretical Overview.....	3
Regional Overview .....	4
Overview of Material Evidence .....	7
The History of Investigations.....	10
Conclusions.....	12
II. SETTING AND METHODOLOGY .....	13
Physical Setting.....	13
Previous Investigations .....	15
The Northern Highlands .....	15
The Transversal.....	17
The Southwestern Petén.....	19
The Great Western Trade Route .....	23
Ethnohistory .....	23
The History of the Candelaria Caves National Park.....	26
Field Methodology.....	28
III. CAVES AND SITES OF THE PASIÓN-VERAPAZ REGION .....	32
Introduction.....	32
The Cave of Hun Nal Ye .....	34
Summary of the Hun Nal Ye Material.....	57
The Candelaria Caves National Park .....	58
Registered Caves in the Candelaria System.....	59

La Lima.....	141
Muqb'ilha' Viejo .....	144
Summary of the Candelaria Caves National Park Data .....	145
The San Francisco Hills.....	145
Registered Caves in the San Francisco Hills .....	147
The Eastern Edge of the San Francisco Hills.....	167
La Caoba Vieja .....	167
Summary of the San Francisco Hills Data.....	169
Other Sites Discussed in this Dissertation .....	171
Dos Pilas .....	172
Cancuen.....	173
Tres Islas .....	174
Raxruha Viejo .....	177
Juliq' .....	178
B'omb'il Pek.....	181
B'omb'il Pek Ruinas.....	181
The Pasión-Verapaz Shrines.....	182
 IV. LABORATORY METHODOLOGY.....	 184
Laboratory Methodology .....	184
Variability in Ceramic Analysis.....	185
The Ware System.....	187
The Type:Variety System .....	189
The French School .....	192
Methodology for the Present Study .....	193
A Note about Ware .....	195
 V. THE NATURE OF THE PRECLASSIC AT THE HIGHLAND-LOWLAND TRANSITION.....	 198
Introduction.....	198
Oq' Complex (1000-800 B.C.) .....	199
Monochromes .....	200
U Chiha Complex (800-300 B.C.) .....	203
Monochromes and Dichromes .....	205
Yitoqil Complex (300 B.C.-A.D. 250) .....	226
Unslipped .....	228
Monochromes and Dichromes .....	232
Puj Complex (150-250 A.D.).....	270
Monochromes .....	270
Bichromes and Trichromes .....	282
Conclusions.....	288
 VI. THE EARLY CLASSIC: THE GOLDEN AGE OF SHRINE USE.....	 293



Introduction.....	293
Pel Complex (A.D. 250-550).....	298
Unslipped .....	298
Monochromes and Dichromes .....	319
Polychromes and Bichromes.....	388
Other Artifacts .....	408
Links to the Central Petén.....	409
Conclusions.....	411
<b>VII. THE LATE CLASSIC TO EARLY POSTCLASSIC: REGIONALISM AND DECLINE .....</b>	<b>413</b>
Introduction.....	413
Jolom Complex (550-830 A.D.) .....	414
Unslipped .....	418
Monochromes and Dichromes .....	437
Polychromes, Bichromes, and Trichromes .....	491
Ru Complex (800-1000 A.D.) .....	509
Monochromes .....	510
Bichromes .....	514
Is Complex (950-1300 A.D.).....	516
Monochromes .....	516
Other Artifacts .....	520
Conclusions.....	521
<b>VIII. RITUALS, RITUAL, AND THE IMPORTANCE OF RITUAL REMAINS.....</b>	<b>525</b>
Several Problematic Aspects of Ritual Activity .....	525
Ritual and Shamanism .....	526
Ritual and Power.....	528
Problematic Aspects of Ritual Assemblages in Archaeology.....	531
Problematic Aspects of Ritual in Maya Archaeology.....	533
Early Maya Archaeology .....	533
Ritual in Iconography .....	535
Unifying Concepts of Maya Ritual.....	536
Ritual and Caves .....	537
Early Cave Investigations .....	537
Naj Tunich and the Founding of Maya Cave Archaeology .....	539
The Rise of Regional Cave Surveys .....	540
Varied Aspects of Ritual in the Pasión-Verapaz Region .....	542
Architectural Incorporation.....	542
Associations with Water .....	545
Ritual Movement .....	549
Myth.....	552
Ritual Styles in the Pasión-Verapaz Region .....	555
Public Ritual.....	555

Ritual Styles .....	560
Trade Shrines and Pilgrimage Shrines .....	564
The Pilgrimage Problem .....	564
Trade and Pilgrimage .....	566
The Functions of Ritual in the Pasión-Verapaz Region.....	568
Ritual as Releasing Tension.....	568
Ritual as Marking Place .....	570
Ritual as Economic Resource .....	573
Conclusions.....	574
 IV. CONCLUSIONS .....	 577
Introduction.....	577
Ritual Remains as Ritual Remains.....	577
Relationship to other Cave Surveys .....	578
Ritual Remains as Historical Record .....	580
An Examination of Ancient Maya Trade Routes.....	581
“Ethnicity,” Ethnoscapes, and the Pasión-Verapaz Region.....	583
Future Investigations.....	585
Conclusions.....	586
 BIBLIOGRAPHY.....	 588
 Appendix A: OTHER ARTIFACTS.....	 625
 Appendix B: A BRIEF DESCRIPTION OF WARES.....	 705

## LIST OF FIGURES

Figure	Page
1-1 The Pasión-Verapaz Region.....	5
1-2 Stone Box Lid from Hun Nal Ye.....	8
2-1 The Maya World with Selected Sites Discussed in this Dissertation.....	14
2-2 Map of the Maya World with Probable Beds of the Eastern and Western Trade Routes .....	22
2-3 Probable Beds for the Great Western Trade Route in the Pasión-Verapaz Region.....	24
2-4 The Candelaria Caves National Park.....	26
2-5 Key for Cave Maps .....	30
3-1 The Pasión-Verapaz Region with Principal Cave Sites.....	33
3-2 La Cueva de Hun Nal Ye.....	35
3-3 Entrance to Hun Nal Ye.....	36
3-4 The Stone Box, Hun Nal Ye.....	38
3-5 HNYV-1 and HNYV-2.....	39
3-6 HNYV-3.....	40
3-7 HNYV-4 and HNYV-3.....	41
3-8 HNYV-5.....	42
3-9 HNYV-6.....	43
3-10 HNYV-7.....	44
3-11 HNYV-9.....	45
3-12 Location of the Majority of Vessels in Hun Nal Ye .....	46

3-13	HNYV-19.....	49
3-14	HNYV-20.....	50
3-15	HNYV-30.....	52
3-16	Stone Box, Hun Nal Ye .....	54
3-17	The Candelaria Caves National Park .....	58
3-18	Investigated Caves in the Candelaria System .....	60
3-19	Entrada del Sol.....	63
3-20	Ventana de Seguridad .....	66
3-21	Entrance 1, Ventana de Seguridad.....	67
3-22	Platform 1, Ventana de Seguridad.....	68
3-23	Excavation Units on Platform 1, Ventana de Seguridad.....	70
3-24	CND-1-3-24.....	73
3-25	Ventana de Seguridad, Middle Section.....	79
3-26	CND-101 to 3, Ventana de Seguridad .....	81
3-27	Entrance 2, Ventana de Seguridad.....	83
3-28	Cúpula de Murciélagos .....	85
3-29	El Venado Seco.....	87
3-30	Verónica.....	89
3-31	Entrance, Verónica.....	90
3-32	CND-202-1 to 10, Verónica.....	99
3-33	Sala Trasera, Verónica .....	107
3-34	Ventana de Verónica.....	111
3-35	Cueva la Iluminada .....	114

3-36	Cueva la Iluminada, part 1 .....	115
3-37	Cueva la Iluminada, part 2 .....	117
3-38	Cueva la Iluminada, interior platform.....	119
3-39	Cueva la Iluminada, part 3 .....	121
3-40	El Venado no. 1 .....	125
3-41	El Pato.....	126
3-42	Platform 1, El Mico.....	128
3-43	Los Chinchos.....	130
3-44	Los Nacimientos .....	131
3-45	Ratón de los Dientes .....	132
3-46	Ratón de los Dientes, Entrance 1 and 2 .....	133
3-47	Los Metates.....	138
3-48	Los Metates, Chamber 1 .....	139
3-49	La Lima.....	141
3-50	La Lima Group A.....	142
3-51	Excavations in La Lima .....	143
3-52	Map of the Candelaria Caves National Park Indicating Muqb'ilha' Viejo .....	144
3-53	View of the San Francisco Hills from Cancuen.....	146
3-54	Los Murciélagos.....	147
3-55	Mushroom Cache, Los Murciélagos .....	149
3-56	Queso Suizo .....	150
3-57	Las Manos.....	152
3-58	Cueva del Coche .....	154

3-59	Kaaminaq So'tz.....	156
3-60	El Águila, lower part.....	162
3-61	El Águila, lower part.....	163
3-62	La Barba.....	164
3-63	La Caoba Vieja .....	168
3-64	Other Sites Discussed in this Dissertation .....	171
3-65	Cancuen (During the Rainy Season).....	173
3-66	Stela 2, Tres Islas .....	175
3-67	Raxruha Viejo.....	177
3-68	Juliq' .....	178
4-1	Color Code for the Ceramic Drawings .....	194
5-1	Preclassic Sherd Count per Complex.....	198
5-2	Abelino Group .....	200
5-3	U Chiha Groups by Sherd Count .....	203
5-4	U Chiha Forms by Sherd Count.....	204
5-5	U Chiha Pastes by Sherd Count .....	205
5-6	Juventud Group.....	206
5-7	Juventud Group.....	207
5-8	Boolay Group.....	213
5-9	Pital Group.....	215
5-10	Plan View of Structure 190.....	250
5-11	Unknown Group.....	224
5-12	Unknown Group.....	225

5-13	Yitoqil Groups by Sherd Count .....	226
5-14	Yitoqil Forms by Sherd Count .....	227
5-15	Yitoqil Pastes by Sherd Count .....	228
5-16	Achiotes Group .....	229
5-17	Sierra Group .....	232
5-18	Sierra Red Mushroom Pot .....	233
5-19	Flor Group .....	240
5-20	Polvero Group .....	245
5-21	Baclam Group .....	250
5-22	Baclam Group .....	251
5-23	Baclam Orange Mushroom Pot .....	252
5-24	Boxcay Group .....	257
5-25	Boxcay Group .....	258
5-26	Differentiated Color Group .....	261
5-27	Boxcay Group .....	271
5-28	Cachil Group .....	275
5-29	Witz Group .....	280
5-30	Witz Group .....	281
5-31	Ixcanrío Group .....	286
5-32	Location of Middle Preclassic Ceramics and Regional Affiliations .....	289
5-33	Location of Late Preclassic Ceramics and Regional Affiliations .....	290
6-1	Pel Groups by Sherd Count .....	294
6-2	Pel Forms by Sherd Count .....	296

6-3	Pel Pastes by Sherd Count .....	297
6-4	Quintal Group .....	299
6-5	Quintal Group .....	302
6-6	Quintal Group .....	304
6-7	Quintal Group .....	305
6-8	Quintal Group .....	306
6-9	Quintal Group .....	308
6-10	Sierra Group.....	319
6-11	Sibales Group.....	321
6-12	Polvero Group.....	326
6-13	Differentiated Color Group.....	331
6-14	Ixobel Group .....	333
6-15	Águila Group .....	335
6-16	Águila Group .....	336
6-17	Águila Group .....	337
6-18	Águila Group .....	338
6-19	Muqb'ilha' Group.....	350
6-20	Pucte Group .....	358
6-21	Balanza Group .....	365
6-22	Balanza Group .....	366
6-23	Balanza Group Miniatures .....	367
6-24	San Martin Group .....	378
6-25	Chipilin Group .....	380



6-26	Javiér Group.....	383
6-27	Cajeta Group.....	385
6-28	Puñazo Group.....	387
6-29	Actuncan Group.....	391
6-30	Dos Arroyos Group.....	393
6-31	Dos Arroyos Group.....	394
6-32	Dos Arroyos Group.....	395
6-33	Dos Arroyos Group.....	396
6-34	Dos Arroyos Group.....	397
6-35	Caldero Group.....	405
6-36	Location of Early Classic Ceramics and Regional and Interregional Affiliations .....	409
7-1	Jolom Groups by Sherd Count.....	415
7-2	Jolom Forms by Sherd Count.....	416
7-3	Jolom Pastes by Sherd Count.....	417
7-4	Cambio Group.....	419
7-5	Cebada Group .....	426
7-6	Chatillas Group.....	427
7-7	Patepa Group.....	432
7-8	Chanchan Group .....	434
7-9	Osoquin Group.....	435
7-10	Tinaja Group .....	438
7-11	Tinaja Group.....	440
7-12	Tinaja Group.....	441

7-13	Azote Group.....	451
7-14	La Isla Group .....	453
7-15	Chablekal Group.....	458
7-16	Chachab' Group.....	459
7-17	Gladiola Group.....	462
7-18	Chichicaste Group.....	465
7-19	Chichicaste Group.....	467
7-20	Chichicaste Group.....	468
7-21	Sechochoc Group.....	480
7-22	Raxruha Group .....	484
7-23	Max Group.....	490
7-24	Saxche Group.....	492
7-25	Palmar Group.....	494
7-26	Palmar Group.....	495
7-27	Saxche-Palmar Group.....	498
7-28	Batcab Group .....	502
7-29	Rub'el Group .....	529
7-30	Ru Pastes by Sherd Count.....	510
7-31	Jelic Group.....	515
7-32	Lima Group.....	518
7-33	Carlota Group.....	519
7-34	Location of Late Classic Ceramics and their Cultural Affiliations.....	522
7-35	Location of Postclassic Ceramics and Cultural Affiliations.....	523

8-1	The Stone Box from Hun Nal Ye .....	547
A-1	Types of Artifacts by Count.....	628
A-2	Chert Artifacts .....	637
A-3	Chert Artifacts.....	639
A-4	Chert Artifacts.....	641
A-5	Chert Artifacts.....	643
A-6	Chert Artifacts.....	645
A-7	Chert Artifact .....	646
A-8	Obsidian Bifaces .....	660
A-9	Groundstone Hand-Axes.....	669
A-10	Jade Adzes .....	675
A-11	Pyrite Earflare .....	688
A-12	Other Artifacts .....	691
A-13	Ceramic Disks.....	700

## LIST OF TABLES

Table	Page
3-1 Principal Caves in the Pasión-Verapaz Region .....	34
4-1 Correlation of Ceramic Sequences at Selected Maya Sites .....	197

## CHAPTER I:

### INTRODUCTION

#### **I. The Highland-Lowland Interface**

A common concern in Maya archaeology is the nature of the interaction between the highlands and the lowlands, two regions that are culturally and geographically distinct but interrelated. Traditional models (*e.g.* de Borhegyi 1965) create a simple dichotomy between the two regions, in which the highlands are viewed as a source of raw materials needed in the lowland market. This extends through the reconstructed history of the Maya world, as the highlands are often construed as the place of origin for the lowland population (*Ibid.*, Andrews V 1990).

This dissertation is part of the larger Vanderbilt Cancuen Project, the first major investigation at the highland-lowland transition. It is the first attempt at a regional survey surrounding Cancuen, but is just the first phase of a much larger operation. In order to investigate earlier time periods and the impact the trade route had on the local population, it was necessary to begin a regional study of the Upper Pasión and neighboring regions. In order to undertake this, three Cancuen subprojects were founded—a southwestern Petén survey (2003-present), a northern Alta Verapaz survey (2002-present), and a broad regional survey investigating caves and associated settlements (2001-present). It is the results of the last survey that are the focus of the dissertation.

All of the patterns and hypotheses I describe here are preliminary and will likely be updated and revised in the following decade. During the past seven years, I have visited over seventy caves and twenty archaeological sites in the region, but there are

thousands more that remain to be discovered. While this is just a small fraction of the total archaeological record, this is the inevitable reality of archaeology.

## **II. Definition of a Shrine**

The term *shrine* is rather nebulous in anthropology and religious studies—while originally referring to a box in which sacred objects were held (Pike 1958:351), it now more generally refers to any place or object which contains sacredness. Kauffman (1967:392) defined a shrine as a “holy place, as a church, a receptacle of the relics of a holy person, or the tomb of a saint.” The boundary of the shrine is nebulous, partially because its sacredness infuses the surrounding landscape.

This fundamental “contagiousness” of the sacred and the inability to neatly separate the sacred from the profane exists in the caves and hills in this region as well. Certain caves and certain cave sections received the majority of observed ritual activity, but there is evidence of sporadic ritual events found in all caves throughout the region, and most cave sections.

When possible, I will refer to specific hills, caves, or cave sections in the discussion of the archaeological evidence, but *shrine* will be used to refer to all of these areas when necessary.

## **III. Thematic Overview**

The Pasión-Verapaz region is a key area for understanding the nature of highland-lowland interaction. Not only is it contested ground with constantly shifting boundaries but one of the principal trade routes connecting the two regions passed through it.

Eight chapters follow this introduction, arranged into three themes—introductory remarks, material evidence and culture history, and synthesis and conclusions. Chapter two contains a general description of the region, the history of archaeological investigations there, and an explanation of the methodologies used in the field. Chapter three is devoted to a description of the different caves and sites that form the substance of the dissertation.

The following four chapters contain the ceramic data, which composes the majority of the dissertation's bulk. Chapter four explains the analytic framework and methods used for studying the ceramics, and in chapters five to seven I attempt to recreate the history of the region, largely through interpreting the ceramic data. Chapter five focuses on the Middle to Terminal Preclassic, which was an era of slowly-increasing shrine use. Shrine use peaks in the Early Classic before diminishing in the Late Classic as the region becomes heavily populated for the first time. All evidence of activity in the region ceases during the Classic collapse.

Chapter eight reconstructs patterns of shrine use in order to address the nature and potential functions of ritual activity in the Maya world. The final chapter concludes the dissertation, synthesizing the ideas present throughout and outlining the different ways that an investigation of ritual activity can increase our knowledge of ancient society.

#### **IV. Theoretical Overview**

While it is impossible to truly reconstruct ritual because behavior—especially patterned, symbolically charged behavior—it is possible to tease out certain trends and associations in the material evidence. A wide variety of sources provide the basis for

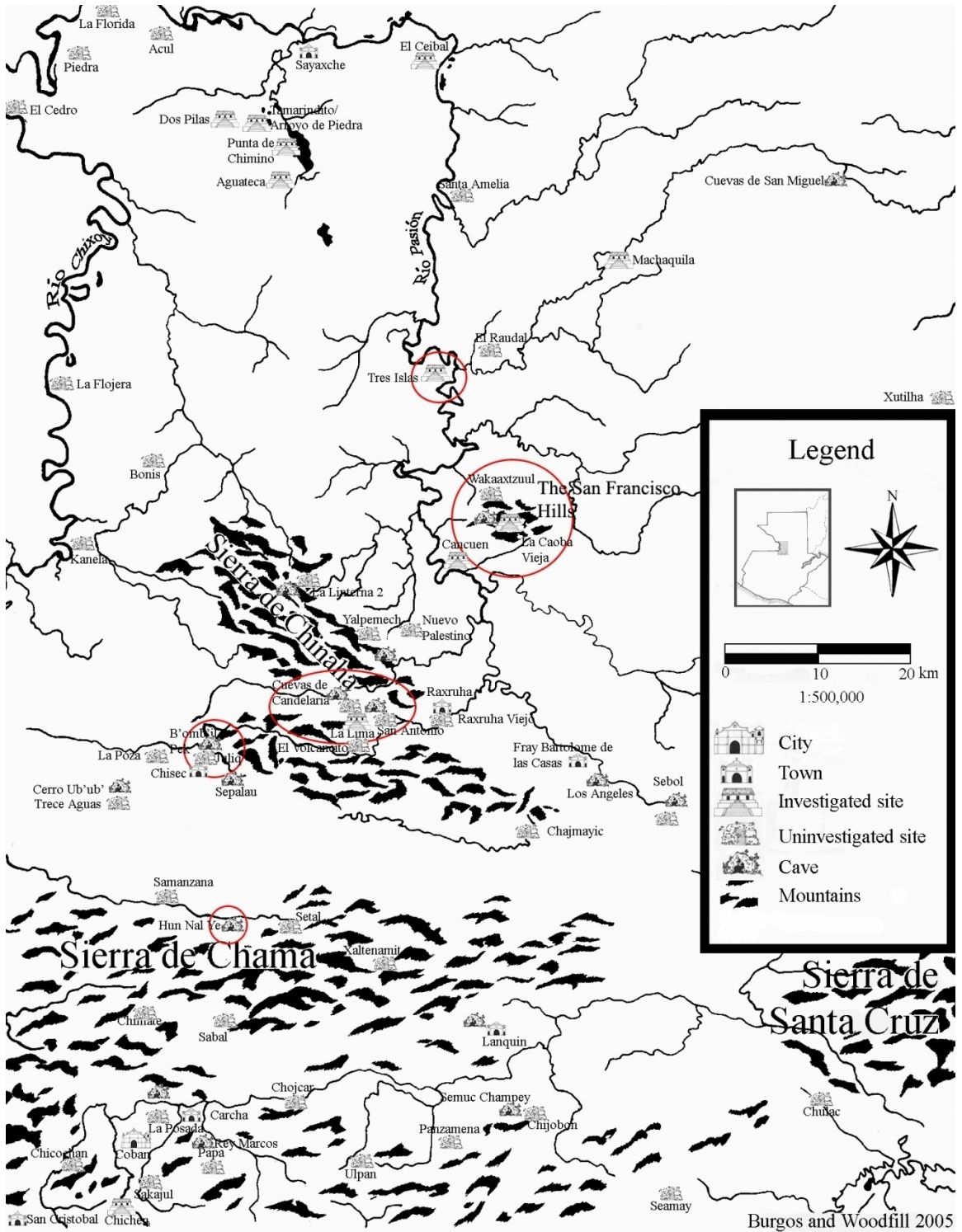
much of the interpretation of the data, beginning with Catherine Bell (1992, 1997) and Roy Rappaport (1999)—two scholars with a very different understanding of what ritual entails. Bell views ritual as a way to reinforce social stratification, while Rappaport views ritual as a fundamental building block in the creation of a distinctly human world view.

Since this research is still ongoing, I have attempted to present several distinct ways to think and talk about Maya ritual. These do not form an exhaustive list—indeed, they are not necessarily a list in the traditional sense. Instead, the interpretations and ideas presented in this dissertation are intended as a starting point for future inquiries.

## **V. Regional Overview**

The present investigation straddles both ends of the highland-lowland divide (figure 1-1), the last foothills of the Cuchumatán Mountains and the southernmost plains located beneath them. The area is mostly devoid of large settlements—in fact, only four major sites are known, and all date their principal phase of occupation to the Classic period. While ample evidence has been documented elsewhere (Arnauld 1990, Demarest and Fahsen 2002, Hammond 1972a) that, by the Late Classic, one of two major trade routes in the Maya world passed directly through the region, little direct evidence has been published which shows that the region had the same importance in earlier time periods. Investigations up to the present in the region have not strayed far from the proposed trade route and can be divided into three areas—the northern highlands, the transversal, and the southwestern Petén.





**Figure 1-1: The Pasión-Verapaz Region**

The seat of the Upper Pasión in the Late Classic was Cancuen (Demarest and Fahsen 2002, Kovacevich 2003), which was established at the headwaters of the river ca.

A.D. 600 in order to take advantage of the flow of goods traveling down from the highlands. Unlike many Maya centers, the site has little monumental architecture, consisting mostly of a giant palace and some secondary elite structures surrounded by a multitude of workshops for jade, pyrite, obsidian, and other highland goods.

Ian Graham (1965) discovered references to an Early Classic seat of power of the Upper Pasión at the site of Tres Islas, located at the confluence of the Pasión and the Machaquilá Rivers. The site has one prominent feature—a row of three Early Classic stelae, each of which depicts a man dressed in Teotihuacano garb. In spite of these monuments, however, there are few structures associated with them, and Tres Islas was probably a shrine associated with the actual capital.<sup>1</sup> The site does have some Preclassic ceramics and a small Late Classic component but appears to have been used almost exclusively in the Early Classic.

Across the river from Tres Islas are the San Francisco Hills, an area of approximately thirty-five square kilometers typified by “haystack karst”—steep hills filled with small caves (Woodfill, Miller, *et al.* 2003; Spenard 2006). Three large hills are visible in the entire Upper Pasión, dominating the horizon at Cancuen and Tres Islas. Several ancient settlements have been found here; one, La Caoba Vieja, was sampled by VUPACS in 2002.

South of the Upper Pasión Kingdom, underneath the last foothills of the northern highlands, are located the Candelaria Caves. Twenty-three kilometers of the Río Candelaria flow through the seven principal caves of the system and among the numerous karst towers above and around them. Unlike others in the region, these are large,

---

<sup>1</sup> Which Tomasic *et al.* speculate was the nearby site of El Raudal.

dramatic caves, often with 30 meter ceilings and illuminated by numerous large entrances and skylights.

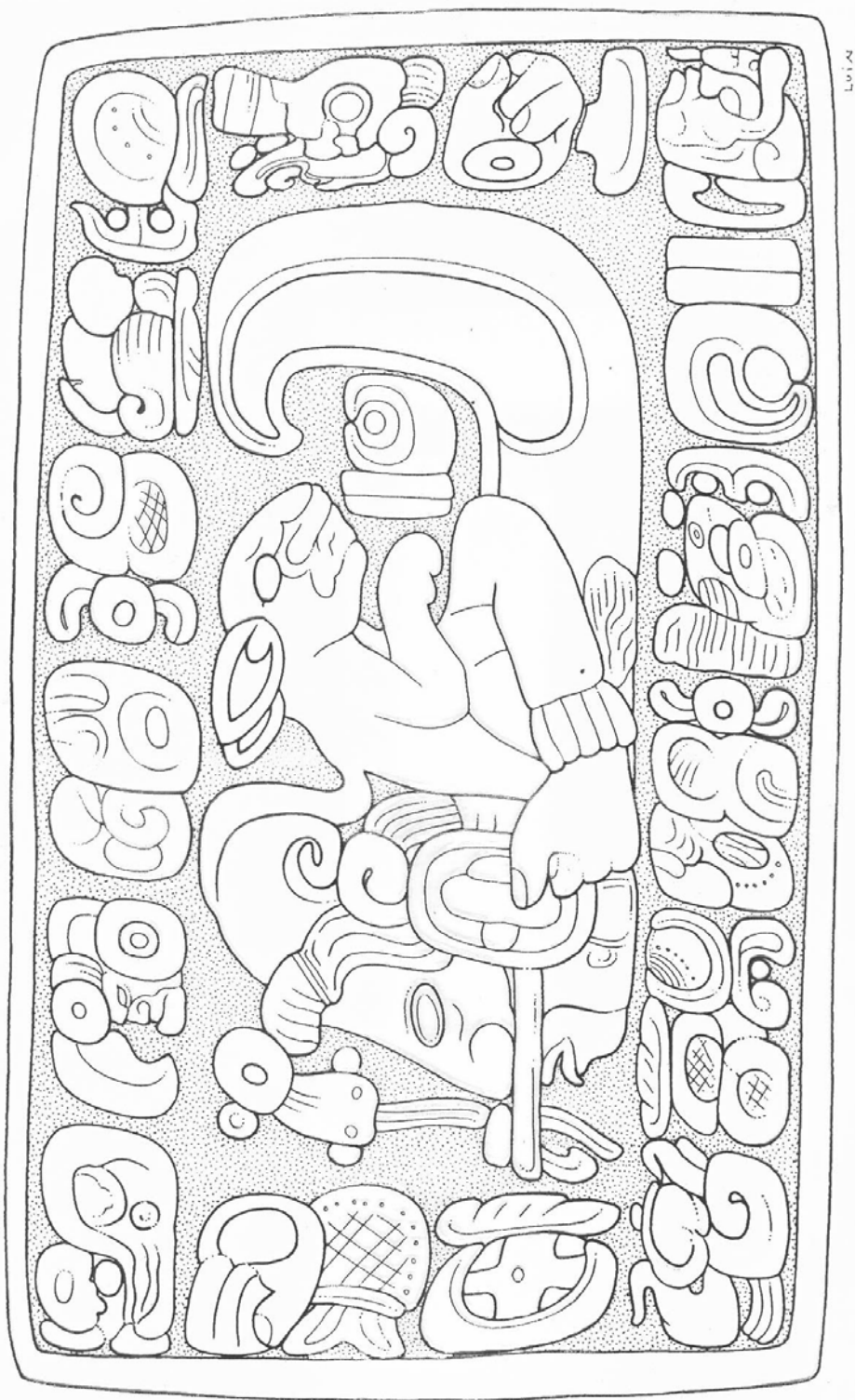
Two villages are associated with the caves, La Lima and Muqb'ilha' Viejo. La Lima is a small village consisting of approximately six mound groups spread out over 1.5 kilometers following a narrow, roughly east-to-west valley. The two principal mound groups are located at the extreme edges of the site in front of large entrances to one of the four largest caves in the Candelaria system, the principal focus of Late Classic ritual activity (Monterroso and Woodfill 2006, Monterroso 2006). Muqb'ilha' Viejo is located in the center of the system and a small test-pitting program (Woodfill and Monterroso 2007b) suggests that it was contemporaneous with La Lima.

To the west of the Candelaria Caves are Juliq' and B'omb'il Pek, two caves that were primarily used during the Early Classic period. While they do not appear to have been as important as other caves in the region, they contain a large number of charcoal drawings.

The southernmost cave under study in the present project is Hun Nal Ye, a small cave atop a waterfall that was reported by landowner Leonidas Javier in 2005. The cave was unlooted and contains a wealth of whole vessels dating to the Late Preclassic and Classic periods. In addition, an Early Classic stone box (figure 1-2), one of the few examples in the Maya world, was recovered *in situ* in a small nook.

## **VI. Overview of Material Evidence**

Between 2004 and 2006, my team and I analyzed over 36,000 sherds and 8,613 other artifacts which revealed shifting cultural affiliations and power relations. Since the



Lot 14



Figure 1-2: Stone box lid from Hun Nal Ye

region is located at the transition between highlands and lowlands, it is not surprising that the zone exhibited characteristics of both regions through the history of occupation.

The earliest evidence of human activity in the region dates to about 1,000 B.C., and the following 1,300 years are characterized by sporadic cave and shrine use by scattered groups of locals and a slowly-increasing number of travelers through the region. The materials exhibit a more or less equal balance of highland and lowland traits throughout the Middle Preclassic, although by the Late Preclassic (ca. 250 B.C.), the material was predominately lowland. By the end of the Preclassic, however, caves in the southern part of the region had fallen under the sway of highlanders.

By the Early Classic (ca. A.D. 250), shrine use had become fairly regular, but it surged to unprecedented levels around A.D. 460 throughout the region. Because of the predominately lowland nature of the remains, this is most likely due to formal control of a trade route passing through the region by residents of the central Petén. The southern region, however, continues to exhibit ties to the central highlands.

In the Late Classic (ca. A.D. 550), shrine use decreased as the region's population exploded, largely by immigrants from the northern highlands. The little use that is exhibited has a much more local character than previous time periods and consists mostly of northern highland, transversal, or Cancuen-sphere ceramics.

The Terminal Classic (ca. A.D. 830) hit the region particularly hard. While some of the villages to the south were able to maintain steady populations through associations with the bustling northern highlands, the northern area was largely abandoned. By the

close of the Classic (ca. A.D. 900), however, the region and its shrines were abandoned and remained without evidence of use until the *chicle* boom of the twentieth century.

## **VII. The History of Investigations**

The Vanderbilt Upper Pasión Archaeological Cave Survey began in 2001 as a small project focusing on the San Francisco Hills. In 2002, research was split between the San Francisco Hills and Juliq', the latter at the behest of a local tourist committee that was interested in opening part of the cave to tourism. Initial excavations were also undertaken at a surface site in the Hills area, La Caoba Vieja (Woodfill, Miller, *et al.* 2003). The San Francisco Hills were abandoned in 2003 in order to partner with US AID and the Guatemalan Ministry of Culture to create the Candelaria Caves National Park. Most of the season was spent performing an archaeological inventory of the caves (Woodfill *et al.* 2004), although a tourist impact study (Ramírez and Woodfill 2004) and limited excavations at La Lima (Segura and Monterroso 2004) the Candelaria system (Woodfill, Ramírez, *et al.* 2004) were also undertaken.

Research in 2004 continued in the Candelaria system, which was devoted equally to cave survey, cave excavations, and excavations in La Lima (Woodfill and Monterroso 2007). A second cave project headed by Jon Spenard (2006) returned to the San Francisco Hills, focusing on the eastern section which was closest to Cancuen. After the field season ended, the emphasis shifted to laboratory analysis, which continued uninterrupted until August 2007. Research in Hun Nal Ye (Woodfill and Monterroso 2007a) was undertaken in 2005 at the behest of the Ministry of Culture after it was discovered by landowner Leonidas Javiér. Investigations in 2006 were limited to four

test-pits in Muqb'ilha' Viejo, a small village in the center of the Candelaria system, and surface collection in several of the Candelaria Caves.

As this brief history demonstrates, the research was not conducted in a linear, organized fashion; instead, a combination of local informants, community development, and fortuitous discoveries allowed for a much larger and more varied project than would have otherwise been possible. This is a double-edged sword—it is not possible to quantitatively compare the material evidence from the different regions, since most of the material evidence derives from the Candelaria system while Juliq' was never subject to a surface collection. Since this was a preliminary study, however, these investigations have allowed the regional project to make great strides in obtaining a preliminary picture of the Pasión-Verapaz region.

Because of the large amount of area covered by the project, only a fraction of the caves visited were chosen for mapping, surface collection, and excavation. The primary factor in determining the level of intensity for the investigation in any particular cave was perceived archaeological potential. While it has been demonstrated (Brady 1989, Brady and Scott 1997) that surface collection is not an accurate predictor for sub-surface artifacts, many of the caves were small with little to no accumulated soil, so it is highly unlikely that they contained much material. Others were excluded due to seasonal flooding, which would have flushed out or buried any artifacts that would have been deposited there.

## VIII. Conclusions

This dissertation is crystallized around a single idea, that ritual remains can serve as an *entrée* into a larger understanding of historical processes, as well as into the multiple functions of ritual itself. The ceramic vessels, obsidian blades, shells, and other objects found in shrines had multiple levels of meaning within the context of ritual activity, but they also were a part of the larger networks of significance and power that existed outside of the shrine.

The majority of this work is devoted to an analysis of ceramics uncovered in caves and hilltop shrines, but they are first discussed *as ceramics*. Only after their relationship to larger ceramic traditions has been established is their relation to ritual activities explored. These two areas of inquiry, while initially appearing to be independent, are actually two sides of the same coin. Shrine use in the Verapaz-Pasión Region was closely connected to larger cultural-historical patterns and interregional trade, which are in turn only understood in the context of the relations of power that were reified by ritual activity.



## CHAPTER II:

### SETTING AND METHODOLOGY

#### **I. Physical Setting**

The Maya area (figure 2-1) is located in the modern-day countries of Mexico, Belize, Guatemala, Honduras, and El Salvador. The region is roughly contained by the Yucatan Peninsula and bounded on the west by the Gulf of Mexico and the Isthmus of Tehuantepec; on the north by the Gulf, on the east by the Caribbean, central Honduras, and El Salvador; and on the south by the Pacific Ocean. It is roughly divided into two main geographical areas—lowlands in the north and highlands in the south.

The lowlands are formed by a large limestone shelf. The central and southern lowlands are hilly and lush, while the northern lowlands are flat and mostly covered by low-lying scrub. The highlands are composed of two distinct geological formations—to the south is an extension of the basaltic Sierra Madre, a mountain range formed by geologic uplift. The northern highlands are dominated by the Cuchumatán Mountains, which are composed of limestone which was uplifted with the mountains to the south.

The region under study is located between the highlands and lowlands, spanning the edge of the Cuchumatán Mountains to the confluence of the Pasión and Machaquila Rivers. The area represents a mingling of characteristics from the two parts of the Maya world. It is largely typified by the variable topography of the highlands (steep, high hills and low valleys) but with the sub-tropical forest and biodiversity of the lowlands.

The topography is widely variable in the southern part of the region—while the southernmost cave in the region is located just over 300 meters above sea level, several

hills top 600 meters. Tres Islas, on the northern extreme of the investigated region, is located at about 150 meters above sea level. At least part of the region is underlain by the Lacondon formation, which is a large karst layer that dates to the Upper Cretaceous (Willey, Smith, *et al.* 1975:11), and while much of the region is now composed of cow pastures and milpa, it has traditionally been subtropical forest.



Figure 2- 1: The Maya world with selected sites discussed in this dissertation

The southern part of the region consists of karst towers and caves that begin fifteen kilometers north of Coban (SEGEPLAN 1996:17-18; Océano 2000:13; Aguilar 2004:97, 99) in the department of Alta Verapaz. The department has average temperatures of 75 to 86 degrees Fahrenheit and average rainfall of between 2,100 and 4,300 millimeters per year (R. Barrios 1995:32, SEGEPLAN 1996:18, Aguilar 2004:38-40); the part of the department located within this region is at the hottest and wettest end of this range. The northern part of the area has an average temperature of 81 degrees Fahrenheit and a dry season marked more by a reduced amount of rainfall than by a true dry spell (Willey, Smith, *et al.* 1975:13-14).

## **II. Previous Investigations**

### *The Northern Highlands*

While the northern highlands are recognized as a distinct cultural zone, there has been a high degree of inconsistency as to how to define it. A. Ledyard Smith (1955) referred to it as Middle Guatemala, an area that covered Huehuetenango, Quiche, Baja Verapaz, Alta Verapaz, and Chimaltenango. A decade later, de Borhegyi (1965:3-4) called it the “Hilly Middle Country” and restricted its area to Alta Verapaz, Quiche, and parts of Huehuetenango and Baja Verapaz. In the same publication, Rands and Smith (1965:11) identified a common ceramic tradition in the “Northern Zone”—Alta Verapaz, Quiche, and Huehuetenango.

Early archaeological investigations there were undertaken at several sites in the northern highlands. Work at Chocoma (Burkitt 1930a, 1930b) and Chama (Butler 1940) provided a basic chronology for the Verapaz region between the Terminal Preclassic and

Early Postclassic. A basic chronology for the southern part of the region was created by Wauchope (1948) at Zacualpa as well.

Members of the Carnegie Institution investigated Nebaj (A.L. Smith and Kidder 1951), and Chipoc (R.E. Smith 1952), and an additional regional survey was conducted by A. Ledyard Smith (1955). Nebaj, which became the best-known of the sites, stood in stark contrast to the other sites—it was a large settlement with elaborate Classic period tombs and strong links to the lowlands, largely because of a well-developed industry producing pyrite mirrors.

In spite of these early forays into the region, de Borhegyi's (1965) synthesis of highland archaeology in *The Handbook of Middle American Indians* overtly excluded the “Hilly Middle Country” aside from a few references to Nebaj, although Rands and Smith (1965:131) noted that it was part of the “Petén diffusion sphere” through the end of the Late Classic. Architecturally, however, there was little connection with the lowlands (A.L. Smith 1965:93). All of the authors agree that there was a high amount of cultural continuity until the Early Postclassic, when escalating warfare resulted in the abandonment of many of the valley sites, the founding of defensible hill-top sites, and increasing isolation from other parts of the Maya world.

After the 1960's, most of the archaeological projects in the northern highlands were conducted by the French (Becquelin *et al.* 2001 [1969], Ichon and Viel 1984, Ichon and Arnauld 1985, Arnauld 1986, Ichon 1992), although Sharer and Sedat (1987a) conducted a survey in the Salamá Valley and work continued at Zacualpa (Wauchope 1975). While earlier investigations had only uncovered evidence of human population in a restricted time period, work at La Lagunita (Ichon and Viel 1984) and in the Salamá

Valley (Sharer and Sedat 1987a) found a large amount of Preclassic occupation beginning around 1000 B.C., while work in southern Alta Verapaz (Arnauld 1986) uncovered continuous settlement until the Spanish conquest.

The region was relatively homogeneous throughout the Preclassic with strong ties to both the Pacific Coast and the southern lowlands (Sharer and Sedat 1987b:246), and the mixing of traits continues throughout the history of occupation in the region (Arnauld 1987:319). Unlike the lowlands, ceramic change was highly conservative throughout the Classic and the first part of the Postclassic—Arnauld (1987) only reported two noticeable differences between the Early and Late Classic.<sup>2</sup> Even the period after the Classic lowland collapse was defined more by the gradual introduction of types that dominate the Late Postclassic material than the sharp break visible in other parts of the Maya world.

Instead of being largely passive, residents of the region were actively involved in trade between the central highlands and lowlands as early as the Early Preclassic (Sharer and Sedat 1987a:253). Some of the earliest ceramics in the Maya world were found in Alta Verapaz (Ibid. 252), and the Salamá Valley has one of the earliest hieroglyphic inscriptions dating to the Middle-to-Late Preclassic transition (Ibid.:90), although writing ceases soon thereafter.

### *The Transversal*

In 1955, A. Ledyard Smith called for future investigations to occur in the unknown area between the Chixoy drainage and Altar de Sacrificios (A.L. Smith

---

<sup>2</sup> Chipilin Red (see Chapter 6) is limited to the Early Classic and the Late Classic material exhibits a greater variety of decorative motifs.

1955:77), as he viewed it as the key to understanding highland-lowland investigation.<sup>3</sup> To date, only one project has heeded his advice. Salinas de los Nueve Cerros (Dillon 1979) was a major site for salt production with strong commercial links to the lowlands while maintaining a strong local tradition. While the primary period of occupation was between the Late Preclassic and the Late Classic, the salt source was still being exploited by the local Akala Maya until after the Spanish conquest (Sapper 1985:17).

The region was ignored by archaeologists for much of the second half of the twentieth century, partially because of its lack of identity but largely to the instability during the civil war, since fighting was especially virulent here (*c.f.* Manz 2004, ODHAG 1998). The first major archaeological project in the region was the Cancuen Archaeological Project, and the present investigation was performed under its auspices. Several smaller investigations have been conducted here over the last century, however, beginning with visits by Teobert Maler (1908) in 1905 and Sylvanus Morley (1937) in 1915, neither of whom reported monumental architecture. In 1967, members of the Seibal Project spent Holy Week at the site (Tourtellot *et al.* 1978). They mapped and reported the palace and excavated eleven test pits, dating the epicenter to the Late Classic.

The first cave survey in the area was undertaken by spelunker Daniel Dreux, who began working in the region's caves in 1968 and is still a constant presence there (Dreux 1968, 1973, 1974, 1978). After discovering large amounts of broken ceramics in caves throughout the region, Dreux invited French alpinist and archaeologist Patricia Carot (1976, 1980, 1982a, 1982b, 1987, 1989) to determine their age (Carot, pers. comm.

---

<sup>3</sup> Andrews V (1990:9) also called for investigations along the same route, but in order to trace the possible *entrada* of ceramics into the lowlands.

2005). She documented an unbroken history of cave use in the region from the Middle Preclassic to the end of the Classic period. While most of the material she documented was lowland, she did report some highland ceramics (Carot 1989:49-50). She also noted a variety of art (Ibid. 26-8) and cave modifications (Ibid.:20-6)—walls, staircases, paths, altars, and platforms. Most surprisingly, she reported a pecked stone cross (Ibid.:61-3), a device of unknown significance with possible Teotihuacano affiliations (Aveni 1989).

In addition to working in the caves, she also mapped and documented several sites of varying sizes (Carot 1989:64-9). While she did not excavate any of the settlements, the presence of monuments at several of the sites and a small amount of material from the largest of the sites suggested a largely lowland population.

A second, brief reconnaissance of the Candelaria Caves was conducted by members of the Salinas de los Nueve Cerros project (Pope and Sibberenson 1981). They traveled through Verónica, the first cave in the system, and recorded a large number of artifacts dating to the Early Classic, which they interpreted as evidence of cave habitation. The project also reported a hieroglyphic inscription dating to the end of the Terminal Classic at a settlement in the Sierra de Chinaja (Dillon 1978).

### *The Southwestern Petén*

The earliest report of archaeological sites in the southwestern Petén was by Alfred Maudslay in 1882, who recorded the presence of a large site at the confluence of the Pasión and Chixoy Rivers<sup>4</sup> (Maudslay and Maudslay 1899:240). Others returned to the region to record monuments at Altar de Sacrificios, Seibal, Dos Pilas, and Aguateca for the following 90 years (Maler 1908; Morley 1938; Kidder 1937, 1944; Vinson 1960; I.

---

<sup>4</sup> Willey and Smith (1969) believe it to be Altar de Sacrificios.

Graham 1967; Ivanoff 1968; J. Graham 1973). As a result of this work, a large corpus of hieroglyphic inscriptions and maps of the major sites of the region were readily available. A combination of epigraphic descriptions of conquest (Mathews 1979, Houston and Mathews 1985, Houston 1987, Mathews and Willey 1991) and the discovery of defensive walls at major sites in the Petexbatun (I. Graham 1967) indicated that warfare played an important role in the history of the region.

Ian Graham (1965) also conducted a limited investigation at the site of Tres Islas, where three carved monuments had been recently reported. Each of the monuments depicts Teotihuacano-style warriors and dates to between AD 400 and 475 (Tomasic *et al.* 2005). They are the earliest recorded monuments in the Pasión region (E. Barrios 2006) and show that the region had exotic ties at a relatively early date.

The region was truly defined by three archaeological projects—Altar de Sacrificios, Seibal, and the Petexbatun Regional Archaeological Project. The first two were undertaken between 1958 and 1968 by the Peabody Museum and led by Gordon Willey (1990, Willey and A.L. Smith 1969). The sites proved to be important because they provided a more detailed perspective on the rise of Maya civilization and the Classic collapse.

Both had evidence of ceramic production predating the supposed introduction of ceramics from the Maya world by several hundred years. They were related to other complexes in Chiapas (R. Adams 1971:118) and the northern highlands (Andrews V:1990), which has traditionally been used to posit a highland origin to the local communities (Ibid.).



Both sites experienced drastic changes in ceramic production, iconography, and settlement patterns immediately preceding their abandonment (Willey 1990:259-60). This was often interpreted as evidence that the Maya collapse was caused by an invasion of “Mexicanized Maya” who took over Seibal and Altar and used them as bases to raid the neighboring region (*e.g.* Sabloff and Willey 1967, R. Adams 1973, J. Graham 1973).

Dos Pilas, which was posited by Willey (1990) to have been the dominant political entity in the region during the Late Classic, had only been subject to a short program of test-pitting in the 1960s (Navarrette and Lujan 1963), and the ceramics revealed a limited period of occupation confined to the Late Classic (Forsyth 1980). In the late 1980s, Steven Houston, an epigrapher who had interpreted many of the texts from the Petexbatun (Houston 1987), teamed with Arthur Demarest, one of Gordon Willey’s former graduate students, began investigations in the Petexbatun region in order to examine the Maya collapse (Demarest 2006:38-41). While it initially focused on defensive walls and epigraphy, the project soon grew to include twelve distinct subprojects spread out among six camps (Demarest 1997:211).

Investigations in the Petexbatun region disproved the “invasion hypothesis” that came out of the Seibal and Altar de Sacrificios project (Stuart 1993, Foias 1996, Demarest 1997), although warfare among local groups seems to have precipitated much of the collapse. While the majority of the projects were geared towards elucidating the processes of the collapse, James Brady’s Petexbatun Regional Cave Survey investigated the use of sacred space by the residents of the Petexbatun, documenting myriad ways that caves affected settlement patterns (Brady, Scott, *et al.* 1997, Brady 1997). Most of the

elite structures were located above or oriented toward caves or springs as a primary way to legitimate elite power (Brady 1997:615).



Figure 2- 2: Map of the Maya World with Probable Beds of Eastern and Western Trade Routes

*The Great Western Trade Route*

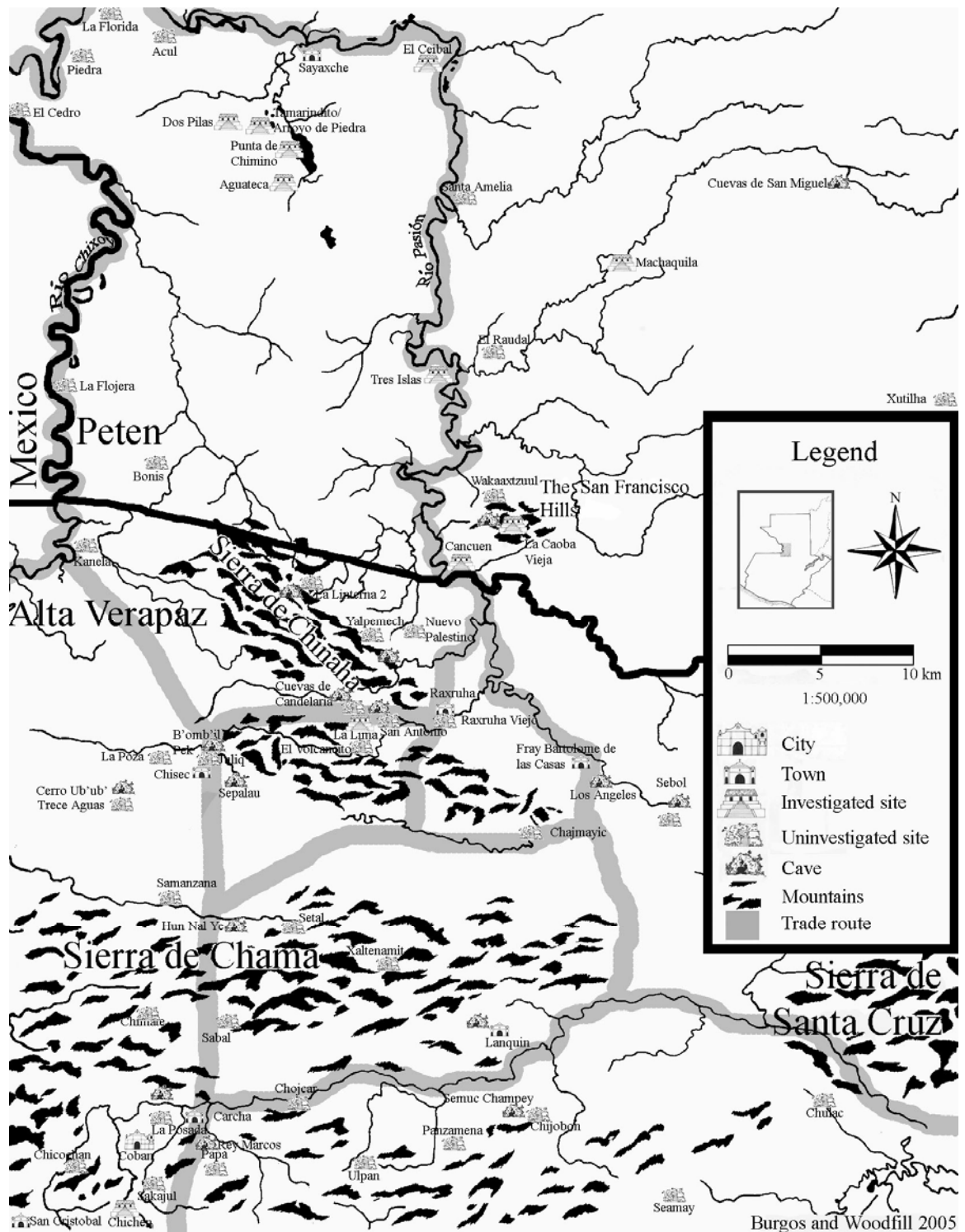
The Great Western Trade Route (figure 2-2, 2-3, Demarest and Fahsen 2002, Woodfill, Fahsen, and Monterroso 2006) is one of two ancient Maya arteries connecting the Guatemalan highlands to the Maya lowlands. Jade, iron pyrite, obsidian, and volcanic stones, as well as perishable goods such as quetzal feathers, salt, feline pelts, rubber, and cacao (Dillon 1975) were a necessary part of Maya life from the Preclassic to the conquest, and were moved between the highlands and lowlands by traveling merchants.

The route currently under investigation was hypothesized by Hammond (1972a), Andrews V (1990), and Arnauld (1990) to have been one of several routes which would have connected the Central highlands of Guatemala to the Río Usumacinta and the lowland market. Outside of the three stelae discovered by Ian Graham (1965) at Tres Islas which depict Teotihuacano warriors, however, there was very little direct evidence of trade passing through the region before the Late Classic.

It appears that the route moved from the Motagua and Salamá Valleys and other neighboring areas into the lowlands, where they would have taken canoes down the Río Pasión and Usumacinta and, eventually, to the major sites of the central Petén. The journey is over 300 km long and drops over a kilometer in altitude, traversing areas of active volcanoes, cloud forests, and tall, sub-tropical forest.

### *Ethnohistory*

Unlike most of Latin America, Alta and Baja Verapaz were incorporated into the Spanish empire by largely peaceful means. After a failed attempt to take the region by force in 1529, Fray Bartolomé de las Casas sent a group of priests into the region to show



**Figure 2- 3: Probable Beds for the Great Western Trade Route in the Pasión-Verapaz Region** that the only true conquest could be done through “patience, persuasion, and kindness” (King 1974:17). Outside of Dominicans, Spaniards were officially excluded from the

region. By the end of the sixteenth century, most of the region was under Spanish control, although the northern and eastern extremes were still unconquered (Ibid.:23), including the region presently under study.

While much of the highland parts of the Verapaz was settled by Kichean Maya groups, the lowlands were inhabited by a mixture of groups, primarily Akala (around Salinas de los Nueve Cerros) and Chol (around Chisec and the Río Pasión), although there were several Q'eqchi' communities dotting the region (Sapper 1985:16-18).<sup>5</sup> These groups raided the “reduced” populations in the lowlands throughout the seventeenth century, and even captured and, according to the Spaniards, ate the cacique of Coban (Wilk 1991:46).

The Verapaz “experiment” began to lose ground in the seventeenth century—the raiding parties necessitated military aid to conquer the northern groups (King 1974:24), although after they were brought under Spanish control the Itza attacked, causing the Spaniards to lose control of the region once again (Ibid.:24). By the eighteenth century, the region began to fragment, due, according to King (1974:26-7), to mismanagement and a paucity of priests. In the nineteenth century, three events completely changed the region—Guatemalan independence, the coffee boom, and an influx of immigrants, largely from Germany, and by the early twentieth century, the isolation of the region was lost as coffee profits soared.

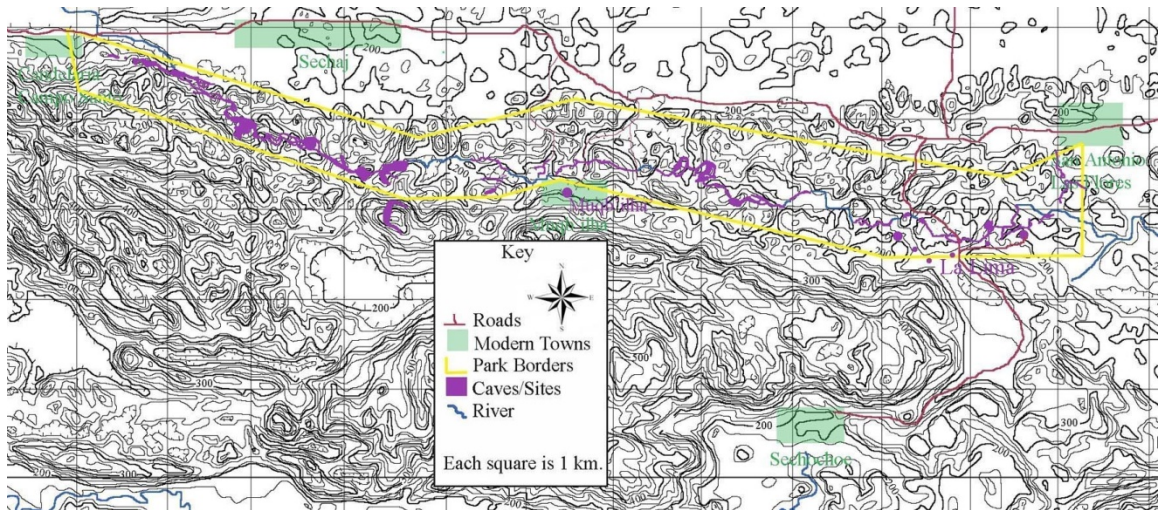
The twentieth century saw waves of migration into the region by the Q'eqchi' and other northern highland groups (Stocks 2002, Manz 2004). Muqb'ilha', a village I have

---

<sup>5</sup> This diversity is replicated today in the names of different towns in the region, which are a mixture of Chol and Q'eqchi' (S. Romero, pers. comm. 2006).

worked with since 2003, for example, was founded by a small group of *chicleros*<sup>6</sup> in the 1960s. The region was hard-hit by the civil war, especially in the early 1980s (Manz 2004, ODHAG 1998).

### III. The History of the Candelaria Caves National Park



**Figure 2- 4: The Candelaria Caves National Park**

All of this project’s research in the Candelaria Caves has been intimately associated with the creation of the Candelaria Caves National Park (figure 2-4), although the park’s roots date to much earlier. French spelunker Daniel Dreux, who had been visiting caves in the Chisec region since the 1960s, brought Candelaria to international attention in 1974. Ten years later, he paid a local Q’eqchi’-Maya family \$1000 for rights to a ¾ acre plot of land in the center of the system to set up a temporary “base camp” (Stocks 2002). He began to bring tourists to the caves in addition to exploring and mapping the system. In 1989, the residents of Muqb’ilha’, a small village located next to the base camp, were allowed by the Guatemalan government to begin the process to

<sup>6</sup> People who collect the sap of the sapodilla tree, which was used to manufacture chewing gum.

receive land rights, and the seeds of a conflict that is reaching a head between Dreux and the village were planted (ibid.).

In 1997, Dreux and his associate Sergio Sierra petitioned to get the caves declared a national park, and a study (FIIT 2001) was commissioned by Guatemala's Consejo de Áreas Protegidas (CONAP). Due to the animosities between Dreux and the locals, however, the project was abandoned (Stocks 2002). Regardless, the caves were declared a National Patrimony Area by the Ministry of Culture in 1999. Because of this, Mucbilha and its neighbor, Candelaria Campo Santo (located on the western edge of the cave system) were informed that their land titles could not proceed, as part of the land in question was a protected area.

Rumors started that the Ministry of Culture was trying to steal the land from the villages, and in 2001, when emissaries from the Ministry visited the caves, they were threatened with gasoline and matches. Tensions escalated still more between Dreux and the villages.

In 2002, Dr. Anthony Stocks, an applied anthropologist from Idaho State University working with USAID, began negotiations for a new type of park (one which mirrored the system being set up at the same time in Cancun by Demarest and USAID [García and Demarest 2004]). Members of the local villages were to be given their land titles at a reduced rate and an official status as co-managers of the park with the Ministry of Culture and Sports in exchange for letting the land around the caves grow back to forest and reducing the slash-and-burn agriculture within the park boundaries. As part of the process of creating a national park, VUPACS was invited into the system in 2003 by

the Ministry of Culture in order to perform an archaeological reconnaissance and tourist impact assessment of the system.

The small plot of land used as a base camp by Dreux and his team has expanded into 22 acres, containing a hotel, a schoolhouse, and a forest preserve. His work in the caves continued, which included the removal of archaeological pieces, which ended up in private collections and museums in France and Guatemala (*c.f.* Brady 1992) as well as at least one large shed in the base camp. He has reported two different murals within the cave system, although only a blurry photo exists of one of them.

In addition to the removal of artifacts, work in the Candelaria Caves has been made more difficult by his endeavors, not only for the highly-charged politics in the villages, but by the movement of archaeological materials, the painting of a series of modern pictographs throughout the system, and the construction of walls and platforms in several of the entrances (some of which were made from original Maya constructions) in order to stage “spectacles.”

#### **IV. Field Methodology**

Research in the field was performed by the Vanderbilt Upper Pasión Archaeological Cave Survey, a subproject of the Cancuen Archaeological Project. There were seventeen members of the project, consisting of archaeologists, cavers, and ecotourism students from the United States and Guatemala. The project also hired over 150 local workers as excavators and cave guides. The majority of the research was undertaken under Cancuen Project permits, although for investigations at Hun Nal Ye an independent permit was acquired.

















Settlements, caves, and hilltop shrines were all investigated by project members. Due to the fact that the region is almost entirely unknown archaeologically (with the exception of Cancuen, Tres Islas, and a few of the caves), researchers have collaborated to a large degree with the local population in all phases of investigation. A four-tiered methodology was undertaken, which is detailed below.

1) An initial reconnaissance of the site is undertaken, normally with local guides, and assessed for its relevance to the present investigation. This system proved advantageous in several ways. We were able not only to find many caves and sites that had not been previously reported, but we were able to interact with members of the local villages, who tend to distrust outsiders. Caves and sites are not only sacred to the Q'eqchi' but are also considered to be repositories of gold and other forms of wealth, so many were initially reluctant to help us because of suspicions that we were motivated by greed.










2) Selected caves and sites were mapped (figure 2-5). Many of the caves we visited had limited archaeological potential, so they were noted and described but set aside for future investigations. The caves were mapped in teams of two or three using a fifty meter tape and either a Brunton surveying compass or a Suunto compass and clinometer. After a basic "skeleton" of data was placed on a large sheet of graph paper using a protractor and a scale, one member of the mapping team would flesh it out, drawing the cave walls, features, and material assemblages while inside the cave. Project artists Güicho Luín, Walter Burgos, and Mirza Monterroso would then ink the map on sheets of Mylar, which would then be scanned into the computer.

# Map Code VUPACS 2004

## Natural features

	Stalagmite
	Stalactite
	Column
	Travertine
	Slope
	Cliff
	Sand
	Clay
	Breakdown
	Window
	Garden
	Topography on the ceiling
	Topography below the primary level
	River/Constant Water

## Cultural features

	Ceramic sherds
	Whole vessel
	Bone
	Obsidian
	Chert
	Stone construction
	Hearth
	Contemporary ceremonial site
	Stone box

**Figure 2- 5: Key for cave maps**

The three principal sites discussed in this dissertation, La Lima, La Caoba Vieja, and Tres Islas, were mapped by Matt O’Mansky or Marc Wolf using a total station, and either AutoCAD (in the case of the former) or ArcView (in the case of the latter). As investigations continued, cave and site maps were modified in Adobe Photoshop.

3) After the caves and sites were mapped, it was common practice to engage in a surface collection in order to gather preliminary information about cultural affiliations and chronology. The basic unit of the collections was a defined feature such as a hearth, collection of sherds, a naturally-defined “nook,” or a structure, and it was assigned a specific number and noted on the map and site registry.

4) Excavations were conducted by a team of local workmen under the supervision of one of the project archaeologists. Units were laid out in a two-by-two meter grid with

levels and lots defined by natural stratigraphy or arbitrary levels of five centimeters (in the case of caves) or twenty centimeters (in settlements). Several of the units were placed in extremely restricted cave passages; they were laid out as close to this ideal as possible.

## CHAPTER III:

### CAVES AND SITES OF THE PASIÓN-VERAPAZ ZONE

#### **I. Introduction**

Between 2001 and 2006, approximately 70 caves in four different, geographically distinct cave systems were investigated in the Pasión-Verapaz region. All of the caves were located along a 40 kilometer stretch of terrain at the nexus of highlands and lowlands. The areas are as follows (figure 3-1): 1) Hun Nal Ye, which is found in the very southern part of the region under study, is a small cave atop a waterfall in the extreme northern highlands. 2) The Candelaria Caves form the second largest cave system in Central America. They are found along an eighteen kilometer stretch of the Río Candelaria, a tributary of the Río Pasión that flows under the last foothills of the highlands. 3) The San Francisco Hills are a large cluster of pyramidal hill-caves surrounded by the flat Petén landscape. In addition to the caves, VUPACS has excavated three settlements. La Lima and Muqb'ilha' Viejo, associated with the Candelaria system, and La Caoba Vieja, associated with the San Francisco Hills.

In addition to being independent, geographic "features," they are all arranged on a largely south-to-north axis, and appear to have been associated with the Great Western Trade Route. All of these areas are significant, not only geographically but also archaeologically, since all have evidence of heavy ritual use during various parts of the region's long history.

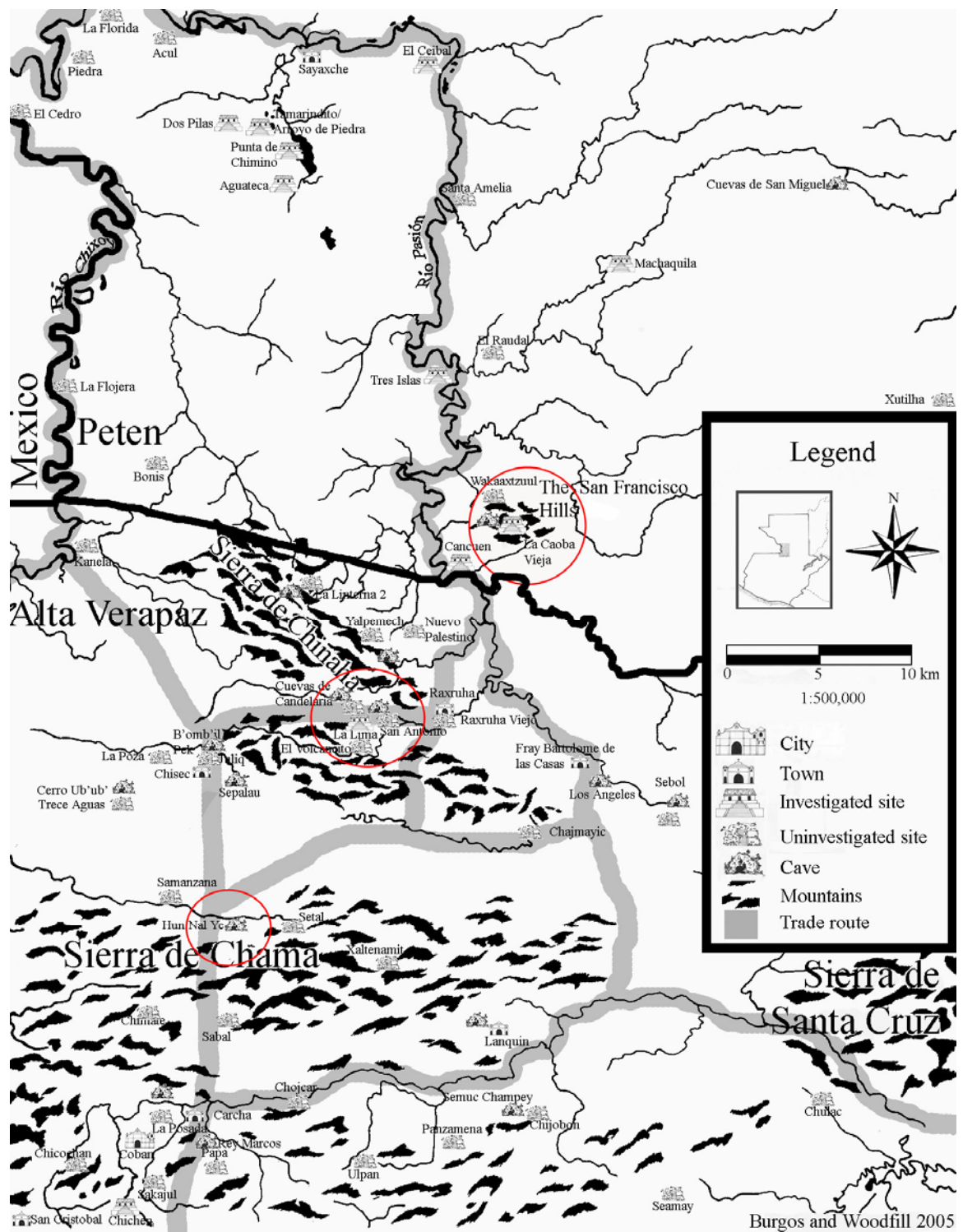


Figure 3- 1: The Pasión-Verapaz Region with principal cave sites

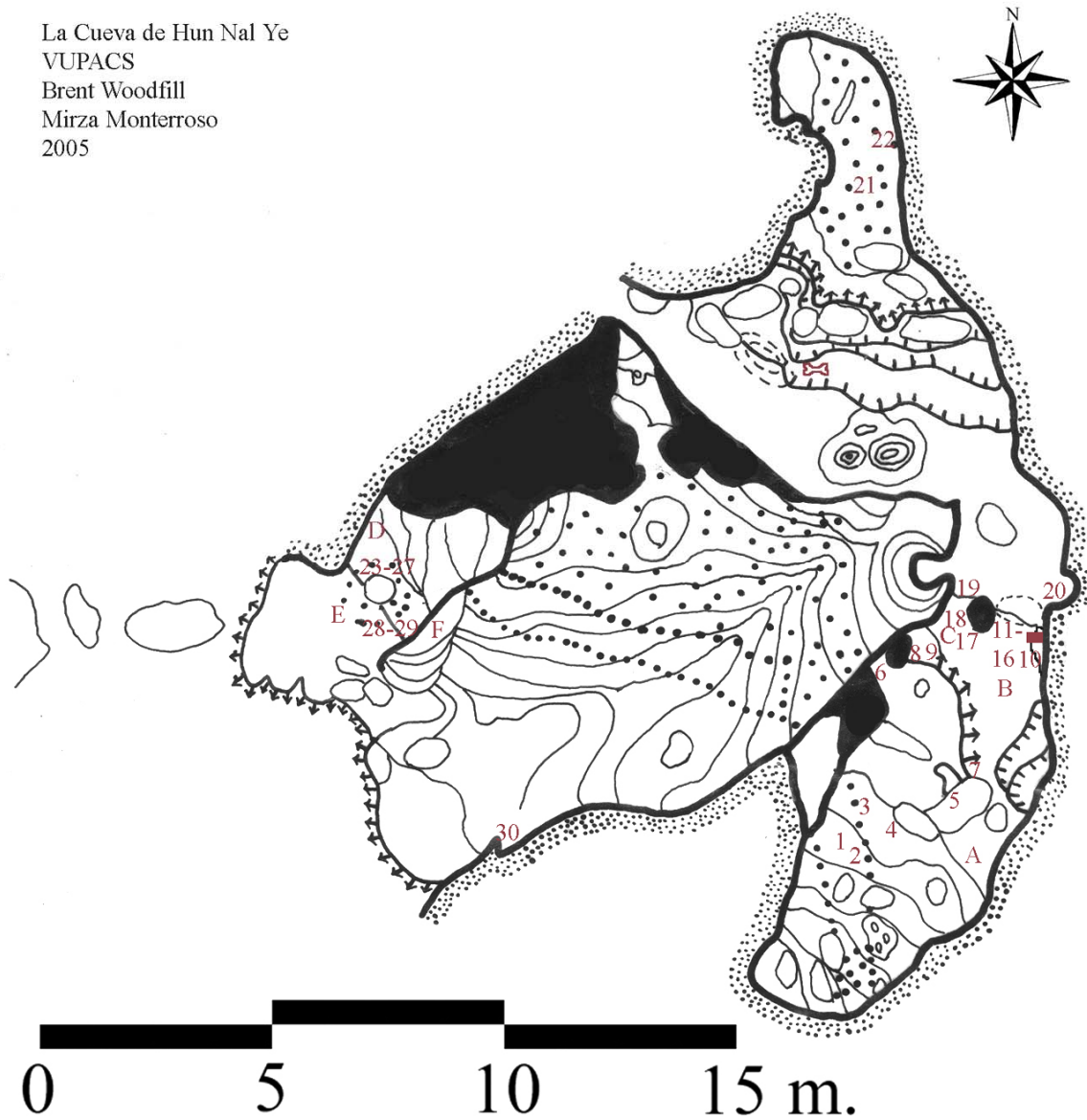
**Table 3-1: Principal Caves in the Pasión-Verapaz Region**

Cave Operation Number	Cave Name	Cave System
CAR-1	Hun Nal Ye	Hun Nal Ye
CND-101	Entrada del Sol	Candelaria
CND-102	Puente del Mico	Candelaria
CND-103	Ventana de Seguridad	Candelaria
CND-104	Cúpula de Murciélagos	Candelaria
CND-201	Venado Seco	Candelaria
CND-202	Verónica (down-river entrance)	Candelaria
CND-202A	Ventana de Verónica	Candelaria
CND-203	La Iluminada	Candelaria
CND-211	El Venado no. 1	Candelaria
CND-213	El Venado no. 2	Candelaria
CND-218	El Pato	Candelaria
CND-301	El Mico	Candelaria
CND-302	Los Chinchas	Candelaria
CND-401	Los Nacimientos	Candelaria
CND-402	Ratón de los Dientes	Candelaria
CND-403	Los Metates	Candelaria
CBA-1-1	Los Murciélagos	San Francisco Hills
CBA-1-2	Los Chuchos	San Francisco Hills
CBA-1-3	Queso Suizo	San Francisco Hills
CBA-1-4	Las Manos	San Francisco Hills
CBA-1-8	El Coche	San Francisco Hills
CBA-1-9	Kaaminaq So'tz	San Francisco Hills
CBA-1-10	Ventanas	San Francisco Hills
CBA-1-11	La Seca	San Francisco Hills
CBA-1-12	El Águila	San Francisco Hills
CBA-1-13	La Barba	San Francisco Hills
CBA-1-14	Shelter	San Francisco Hills
CBA-1-15	Los Bordos	San Francisco Hills

## II. The Cave of Hun Nal Ye

The Cave of Hun Nal Ye (figure 3-2) is located in the northwestern corner of the municipality of Carchá. When it was discovered by the local landowner, Leonidas Javier, he notified Lic. Salvador López of the Ministry of Culture. In April of 2005, Javier, López, and I visited the cave; work was performed there by Mirza Monterroso and me under the jurisdiction of the Ministry of Culture and Sports between March and May of

2005. In addition to mapping the cave, three small excavation units were opened and the vessels were photographed and drawn by Walter Burgos.



**Figure 3- 2: La Cueva de Hun Nal Ye**

Access to the cave itself is restricted—it is located above a small, deep pool above an eight-meter waterfall. During the height of the dry season, it is possible to walk across a series of large rocks atop the cascade, but after any amount of rainfall the water level



rises and a strong current is created, forcing visitors to swim around the far edge of the pool.



**Figure 3- 3: Entrance to Hun Nal Ye (photo by Horacio Martinez)**



The entrance to the cave is located about seven meters above the dry-season water level, but the wall has a series of natural hand- and foot-holds, so once the pool is traversed it is easily accessible (figure 3-3). There are two parts to the cave—a high, single room with a steeply-inclined floor and a naturally “corbelled vaulted” ceiling (the Vault) and a small series of tunnels and chambers underneath it. One whole and two partial vessels were recovered from the Vault; many more found in the pool below likely fell from here. Twenty-nine whole vessels, a partial vessel, a carved stone box, a tapir skeleton, and 679 sherds from smashed vessels were recovered in the lower cave.

Most of the artifacts in the lower cave were recovered at the entrance and in one interior chamber. They are connected by a narrow tunnel that descends seven meters into a small room before ascending to a small crawlspace which opens into a relatively large chamber. Most of the material in the cave was clustered on the back wall of this chamber, including the stone box, two ceramic boxes, and a cluster of other vessels. The stone box (figure 3-4, described below) dates to the Early Classic and was carved on each of the four sides and the lid with hieroglyphic texts and images of gods, scribes, and artisans. Placed inside of the box was a tapir femur covered in calcium carbonate; the rest of the skeleton was found in the next chamber.

Most of the other vessels were empty, aside from a thick, black, organic residue. This material was collected from four vessels using a metal trowel wrapped in a plastic bag and will be analyzed by Dr. Duncan Cook in order to determine its nature. The majority of the vessels were atop or inside of a thick lens of this organic material, which was mixed with sherds from several broken pots and a single obsidian blade (Feature C). The vessel placed at the bottom of this feature, HNYV-18, contained part of a juvenile

pelvis, the only human osteological remains found inside the cave. In front of this cluster of objects, the descent into the room has several other whole vessels. All of the vessels along this descent were at least partially filled with water during the investigations, and many were cemented to the cave floor.



**Figure 3- 4: The stone box, Hun Nal Ye (photo by Horacio Martínez)**

Vessels beyond the wall in the inner chamber were all placed in small nooks or crawl-spaces. With the exception of a large white formation below a constantly dripping stalactite, this part of the cave is completely dry, as were all of the vessels. Those inside the crawl-spaces were placed upside-down.

In addition to the material recovered from the cave, Javier, a trained scuba diver, recovered an additional 16 whole vessels and several partial ones from the pool in front of Hun Nal Ye. Many of these were partially covered in calcium carbonate, indicating that they had fallen into the pool from above.



**Figure 3- 5: HNYV-1 (right) and HNYV-2 (left) (photo by the author)**

HNYV-1: A Cachil Red-on-Buff jar with four handles and a “finger swipe” design on its body (figure 3-5). The vessel dates to the Terminal Preclassic. Both HNYV-1 and HNYV-2 were located in a small travertine pool and this vessel has a small formation growing on one side.

Height: 17 cm

Diameter 12.9 cm

Handle: 2.7 cm tall and extending 2.6 cm outward from the lip.

Handle width: 1.4 cm

Neck height: 2.6 cm



HNYV-2: A Saqe Impressed jar with a matte orange slip (figure 3-5). There is a raised band along the vessel's hemisphere with a band of circular impressions and the base of the vessel is concave. The vessel dates to the Terminal Preclassic. Both HNYV-1 and HNYV-2 were located in a small travertine pool, and this vessel was on its side with the mouth pressed against HNYV-1. Two small kill-holes were made on the vessel body on opposite sides of the vessel.

Height: 16 cm

Diameter: 13 cm

Neck height: 3.4 cm



**Figure 3- 6: HNYV-3 (photo by the author)**

HNYV-3: A Cascadas Incised “flowerpot” with orange slip and an elevated band below the lip with incised triangles (figure 3-6). The vessel was placed on its side in a travertine pool. The vessel dates to the Terminal Preclassic.

Height: 11.5 cm

Diameter: 17.8 cm



**Figure 3- 7: HNYV-4 (left) and HNYV-3 (right) (photo by the author)**

HNYV-4: An Unknown Brown-Black jar (figure 3-7). The slip mottled brown and black and the vessel was irregularly made. It was placed in a small nook. The vessel dates to the Early Classic.

Height: 19 cm



Diameter: 14 cm

Neck height: 3.4 cm



**Figure 3- 8: HNYV-5 (photo by the author)**

HNYV-5: A K'uk' Unslipped miniature jar with fire-clouding on the exterior of the vessel (figure 3-8). It was placed under an active formation. The vessel dates to the Early Classic.

Height: 12.3 cm

Diameter: 14 cm

Neck height: 1.6 cm



**Figure 3- 9: HNYV-6 (photo by the author)**

HNYV-6: A Mariel Black-on-Orange “flowerpot” (figure 3-9). The primary slip is a glossy orange and black arches have been painted atop it. This vessel dates to the Late Preclassic and was placed on its side.

Height: 14.7 cm

Diameter: 13.9 cm





**Figure 3- 10: HNYV-7 (photo by the author)**

HNYV-7: A Puñazo Orange cup (figure 3-10). This vessel dates to the Early Classic and was placed in a small nook.

Height: 7 cm

Diameter: 8.2 cm

HNYV-8: A Chichicaste Brown:ND/smudged interior bowl with vertical walls and an irregular ring base. The vessel dates to the Classic period and was placed face down.

Both HNYV-8 and 9 were placed on an angled wall.

Height: 5.5 cm

Diameter: 17.3 cm



Wall height: 2.3 cm



**Figure 3- 11: HNYV-9 (photo by the author)**

HNYV-9: A Ch'inaus Red-and-Smudged-Black-on-Orange cup decorated with a stylized insect motif (figure 3-11). The interior is smudged and the base is flat. It was placed upside-down atop a large jar fragment. Both HNYV-8 and 9 were placed on an angled wall.

Height: 12.5 cm

Diameter: 12.1 cm

Vessels HNYV-10 to 18 are found on the same wall (figure 3-12).



**Figure 3- 12: Location of the majority of whole vessels in Hun Nal Ye  
(photo by Horacio Martínez)**

HNYV-10: A Cajeta Orange lidded box with a flat base. The vessel dates to the Early Classic and was placed between two formations and has become cemented to the cave.

Organic remains are present inside the box.

Lid: 32.6 cm x 15 cm

Lid height: 5.3 cm

Box: 29 cm x 11.2 cm

Box height: 8.6 cm

Height of the box with lid: 10.2 cm

HNYV-11: A Javier Incised cup with black slip and a circumferential row of triangles below the rim. The vessel dates to the Early Classic and was cemented to the cave and mostly hidden by HNYV-13, 14, and 15.

HNYV-12: A Puñazo Orange cup with slightly in-curving walls. The vessel dates to the Early Classic.

Height: 8.5 cm

Diameter: 8.6 cm

HNYV-13: A Javier Incised cup identical to HNYV-11. The vessel dates to the Early Classic and was located underneath HNYV-14.

Height: 13.3 cm

Diameter: 13.2 cm

HNYV-14: A Chichicaste Brown:ND/smudged interior bowl. The vessel dates to the Early Classic and was placed atop HNYV-13.

Height: 5.7 cm

Diameter: 19.5 cm

Wall height: 2.4 cm

HNYV-15: A Cajeta Orange lidded box. The vessel dates to the Early Classic and has been cemented into the wall. One of the sides of the vessel was broken in antiquity and removed; it was found covered in calcium carbonate nearby. There is black organic residue lining the bottom of the box' interior.

Lid: 32 cm x 16.8 cm

Lid height: 4.3 cm

Box: 29.4 cm x 14.3 cm

Box height: 8.9 cm

HNYV-16: A Witz Orange "flowerpot" with orange slip, orange paste, and a flat base. One of the lips is fractured. The vessel dates to the Terminal Preclassic.

Height: 12.5 cm

Diameter: 15.2 cm

HNYV-17: An unslipped jar with a mottled brown and black surface. It was found almost completely covered by a matrix of black, organic residue and smashed vessels (Feature C); only the rim was visible.



HNYV-18: A jar with a brown slip and incised arches decorating the shoulder. The vessel was completely covered by a matrix of black, organic residue and smashed vessels (Feature C). The mouth was partially sealed by the base of HNYV-17 and part of a juvenile femur was found inside the vessel along with more of the surrounding matrix.



**Figure 3- 13: HNYV-19 (photo by the author)**

HNYV-19: A Hix Fluted jar with a glossy brown slip, a smudged interior, and a slightly concave interior (figure 3-13). The vessel was found in a small nook underneath the entrance to the chamber and was found partially filled with water. It dates to the Classic period.

Height: 13.5 cm

Diameter: 12.7 cm

Neck height: 3.6 cm



**Figure 3- 14: HNYV-20 (photo by the author)**

HNYV-20: A Hix Fluted jar with a glossy brown slip, a smudged interior, and a slightly concave interior (figure 3-14). There are rootlet markings on the shoulder and several black discolorations on the body. The vessel was found in a small crack in a nearly vertical position and dates to the Classic period

Height: 13.4 cm

Diameter: 12.3 cm

Neck height: 3.6 cm

HNYV-21: A K'uk' Unslipped cup placed upside-down. The vessel dates to the Early Classic.

HNYV-22: A Chichicaste Brown:ND/smudged interior bowl placed upside-down. The vessel dates to the Classic period.

HNYV-23: A K'uk' Unslipped cup completely covered with calcium carbonate that has been cemented to the cave floor. The vessel dates to the Early Classic period.

HNYV-24: A K'uk' Unslipped cup completely covered with calcium carbonate that has been cemented to the cave floor. The vessel dates to the Early Classic period.

Height: 7.2 cm

Diameter: 6.9 cm

HNYV-25: A K'uk' Unslipped cup completely covered in calcium carbonate and cemented to the floor with only the upper part of the vessel visible. The vessel dates to the Early Classic period.

Diameter: 6.2 cm

HNYV-26: A K'uk' Unslipped cup covered in calcium carbonate. The vessel dates to the Early Classic period.



Height: 6.7 cm

Diameter: 10.4 cm

HNYV-27: A K'uk' Unslipped cup covered in calcium carbonate. The vessel dates to the Early Classic

Height: 8.4 cm

Diameter: 10.5 cm



**Figure 3- 15: HNYV-30 (photo by the author)**

HNYV-28: A Chanchan Unslipped candelero placed upside-down under a matrix of smashed vessels and clay (Feature E). Both HNYV-28 and 29 were placed at the threshold of the cave.



Diameter: 10 cm

HNYV-29: A Chanchan Unslipped candelero placed upside-down under a matrix of smashed vessels and clay (Feature E). Both HNYV-28 and 29 were placed at the threshold of the cave.

Height: 5 cm

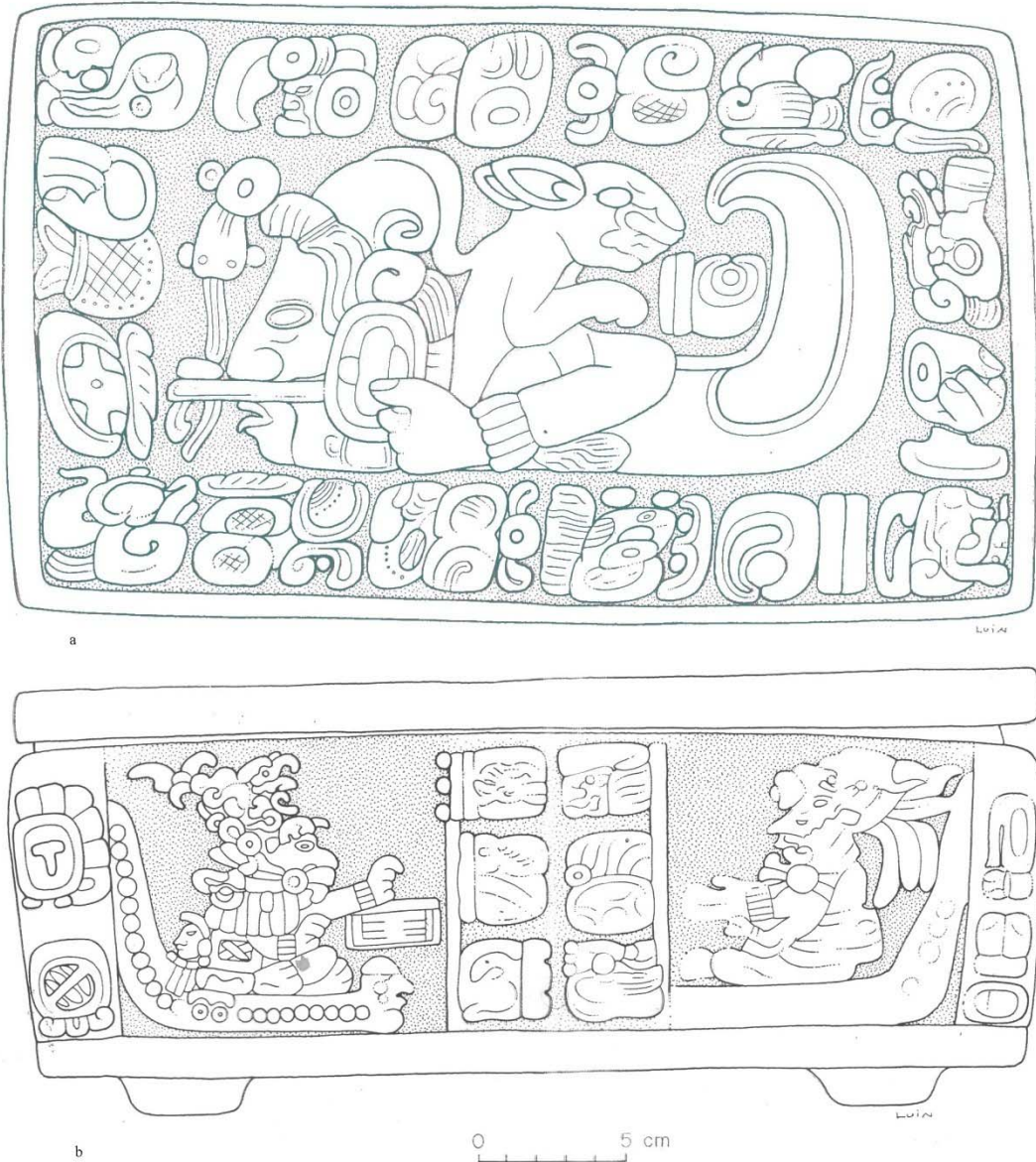
Diameter: 7.1 cm

HNYV-30: A Chanchan Unslipped bowl with an exterior-folded lip (figure 3-15). The vessel dates to the Late Classic and was partially covered in guano.

#### *Carved stone box*

This box (figure 3-4 and 3-15) was made of an unidentified igneous stone and consisted of two parts—a body with four nubbin supports and a lid. The lid and the four sides of the body were carved by at least three different hands.

Decoration on the lid consisted of a ring of glyphs that were interpreted by Federico Fahsen and read “a-ALAY T’AB’ yi-chi yu-lu-?-li U TUUN ? chi-naah IXIM YAL LA HUN U K’AAB’A u-yuul ?-hi-?-ji KAN ?-ich,” which translates: “And so it begins. This carving, this box [followed by the name], the house of the god of the moon, of a 30-day lunation. It was sculpted by [sculptor’s name], this precious [?]” (Woodfill, Fahsen, and Monterroso 2006).



**Figure 3- 16: Stone Box, Hun Nal Ye—lid (a) and side 1 (b)**

There are two different templates for the carvings on the body—the long sides have twin Jaguar Gods of the Underworld facing each other on opposite ends of the image with glyphs in between them. They are holding codices and sitting on serpentine thrones with either bird or human heads at their bases. The two shorter sides have single figures, a scribe and a sculptor, in the process of working. They are surrounded by

glyphs, which on one side are occasionally reversed. At both edges of each side, a raised field contains two large, non-standard, and presently indecipherable glyphs. The other glyphs have been partially translated, and refer to the Death God and K'awil.

It is possible to date the box to the Early Classic through the iconography and glyphic style, which also indicate that it is lowland. It is 38 cm long, 21.7 cm wide, and 10.9 cm tall including the 2.8 cm lid. The supports are 1.6 cm. While Fahsen (pers. comm. 2005) speculates that it might have originally held a codex, only a tapir femur covered with calcium carbonate was found inside.

***Intraregional Comparison:*** This box was found in Hun Nal Ye. Several ceramic boxes were found cached near this artifact and smaller ones were found at Ub'ub', a hilltop shrine north of the site.

***Interregional Comparison:*** Stone boxes are extremely rare in the Maya world, and all of the other examples are Highland and without glyphs. A simple Late Classic box was placed as a cache atop a Preclassic structure at Takalik Abaj (Wolley, pers. comm. 2005) and another from an unknown provenience is on display at the regional museum in Chichicastenango. A third was reported by Ichon (1977) at La Lagunita.

This box shares more characteristics with wooden boxes. Two were recovered in Mexico, one in the Tortuguero region near Palenque (M. Coe 1974) and the other from the state of Tabasco (Anaya et al. 2002). Both had glyphs filling up all four sides and a lip similar to the present example. The lid was only recovered from the Tortuguero box, and it was decorated with an elaborately carved human figure. Another, undecorated wooden box was recovered from a Belizean cave by Pendergast (M. Coe 1974:51).

## **Features**

**A:** A partial Cachil Red-on-Buff vessel (nearly identical to HNYV-1).

**B:** Scattered sherds, likely Late Classic in date.

**C:** Several Late Classic smashed vessels mixed with charcoal, guano, and clay. One obsidian blade was recovered. A total of 184 sherds were recovered belonging to bowls (Ch'inaus Red-and-Smudged on-Orange, Chichicaste Brown, and K'aaleb'aal Incised), cups (Chichicaste Brown and Q'eqibaq Applique), and cylinders (Batz Appliqué).

**D:** Late Classic Alta Verapaz cups with post-firing incisions placed in a crack in the cave entrance.

**E:** A total of 495 sherds from smashed vessels were recovered in a clay matrix at the mouth of the cave. Bowls (Chachab' Grey, Chichicaste Brown, Mozote Cream, and Batz Applique), cups (K'aaleb'aal Incised, Chichicaste Brown, Clavel Orange-on-Cream), and cylinders (Chichicaste Brown, Coralillo Orange Matte, Nopal Trichrome, Mozote Cream, and Batz Appliqué) are common, but several plates (Coralillo Orange Matte) were also present. Most of the sherds seem to date to the Late Classic and overlay HNYV-28 and 29.

**F:** Part of a large Chanchan Unslipped bowl similar to HNYV-30.

**G:** A danta skeleton in a small crack that has been completely covered in calcium carbonate. All of the bones with the exception of one humerus have been cemented to the floor.

*Summary of the Hun Nal Ye Material*

Unfortunately, the cave was ransacked by looters several months after the investigation occurred but before the Ministry could register and remove the whole vessels. The carved stone box and eight of the finest vessels were stolen and many of the other vessels were broken. While the box was eventually recovered, many of the vessels are still missing. Fortunately, most had been photographed *in situ* and many had been drawn by Walter Burgos.

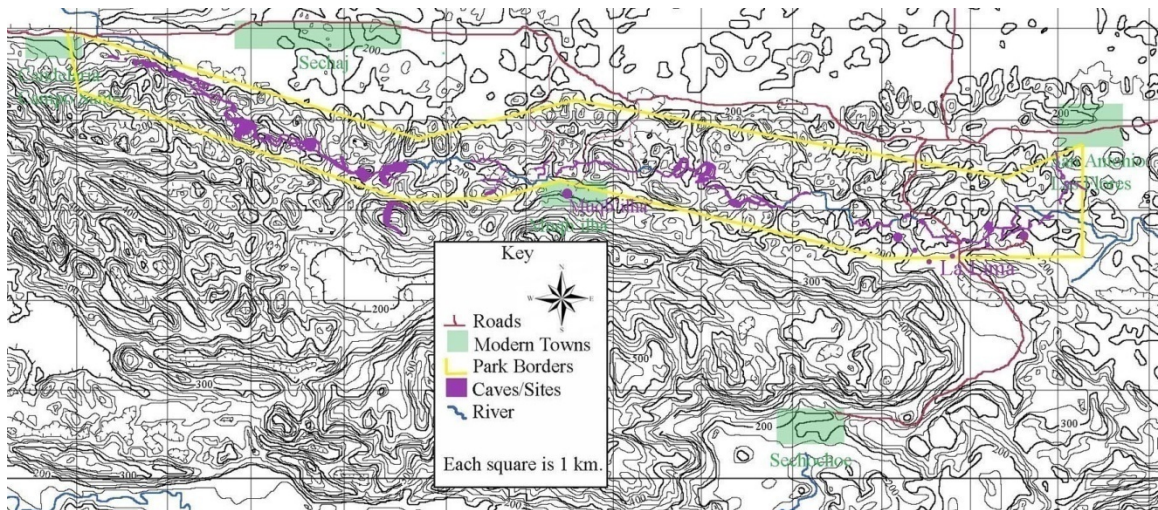
All of the material from the cave (with the possible exception of the tapir skeleton, which was already covered in calcium carbonate by the time the femur was placed in the Early Classic stone box) dates between the Terminal Preclassic and the Late Classic (ca. A.D. 100-850). It is possible to say generally that the Terminal Preclassic and Early Classic material, which composes the bulk of the sample, consists of apparently “exotic” types, normally found in the Valley of Salamá, Guatemala, the Motagua, and the Salvadoran highlands. The box is the one exception to this—it is stylistically lowland (Woodfill, Fahsen, and Monterroso 2006). During the Late Classic, however, the material is local, with relatively standard Alta Verapaz material composing the majority of the assemblage. The Late Classic sample is, however, much smaller than in earlier time periods.

This change from exotic to local between the Early and Late Classic is a pattern that is present at shrines in the entire region, and one that is always accompanied by a significant decrease in material, and one that will be discussed in greater detail at the end of this chapter.

### III. The Candelaria Caves National Park

The Candelaria Caves National Park (figure 3-17) was established by the Guatemalan Ministry of Culture and Sports in 2004. Most of the work performed in the system was done in association with the Ministry and USAID, as part of the process of creating both the park and sustainable cave tourism led by the local population.

Alongside standard archaeological investigations (reconnoitering, mapping, excavating, and collecting surface materials), the project was engaged in assessing caves for tourist potential, establishing low-impact routes through these caves, and training the village leaders, guards, and guides in responsible cave management (Ramírez and Woodfill 2004, Woodfill 2004).



**Figure 3- 17: The Candelaria Caves National Park**

The Candelaria Caves are located at the very highland-lowland transition, underneath the last of the large hills and ridges coming down from the highlands. Cutting through the center of the system is the Río Candelaria, a small tributary of the Río Pasión, which flows through 18 kilometers of its seven principal caves. Above and around these

caves are hundreds of other caves on three different levels, each corresponding to different periods of major uplift.

The Candelaria Cave system is the second largest in Central America (after Chiquibul, also located in the Maya area) and is, appropriately, on a grand scale. Most of the caves under investigation have tunnels that are 30-40 meters wide and up to 70 meters tall, and have large entrances and “skylights” that flood much of the system with sunlight.

While there is a small amount of cave use in the Late Preclassic (and a single sherd from the Late Middle Preclassic), the system was primarily used during the latter part of the Early Classic. Indeed, it appears to have been one of the primary ritual centers in the Maya World during this time period. A large amount of ceramic material, most of which was locally produced, was deposited between about A.D. 460 and 550, after which the ritual activity slowed to a trickle. The last evidence of use dates to the Early Postclassic—a sherd and a partial vessel; this is also the last evidence of human activity in the entire region under study until the modern era.

#### *Registered Caves in the Candelaria System*

Nearly thirty caves in the Candelaria Caves National Park were investigated as a part of VUPACS’ investigations, and 14 of these were mapped and photographed. Surface collecting was used to recover artifacts from ten of these caves, and excavations were undertaken in three of these (a total of fifty excavation units).





Each cave or distinct segment received its own operation number, which were organized according to the modern real or *de facto* political boundaries in the cave system (figure 3-18). All of the caves found in land owned by Candelaria Campo Santo are numbered between 100 and 199, those owned by Mucbilha are numbered between 200 and 299, and in the individual parcels at the end of the system have numbers above 400. The caves found in the part of Mucbilha under the control of Dreux and Sierra have been assigned numbers between 300 and 399, but apart from limited reconnaissance, little work has been done in these caves. This numbering system proved to be the most practical, as all caves were reconnoitered with local guides from the different villages or families.

Although there are seven wet caves along the Río Candelaria in the system, they were, confusingly, only given four names by Dreux. Going down-river (from west to east), they are Verónica, Venado, Mico, and Los Nacimientos. VUPACS' nomenclature differed from Dreux' in several respects. Verónica, which originally consisted of a 6 km. wet cave and three dry ones, was divided into six segments. For each dry cave, local nomenclature was used—Cúpula de Murciélagos (CND-104), Entrada del Sol (CND-101), and Puente de Micos (CND-102). The wet cave, which is split between the villages of Mucbilha and Candelaria Campo Santo, is split between the up-river entrance (Ventana de Seguridad [CND-103]) and the down-river part, Verónica (CND-202), for which Dreux' nomenclature was used. A section of the cave discovered later that is only accessible from a different entrance high above the main passage was given a different name and sub-operation—Ventana de Verónica (CND-202A).

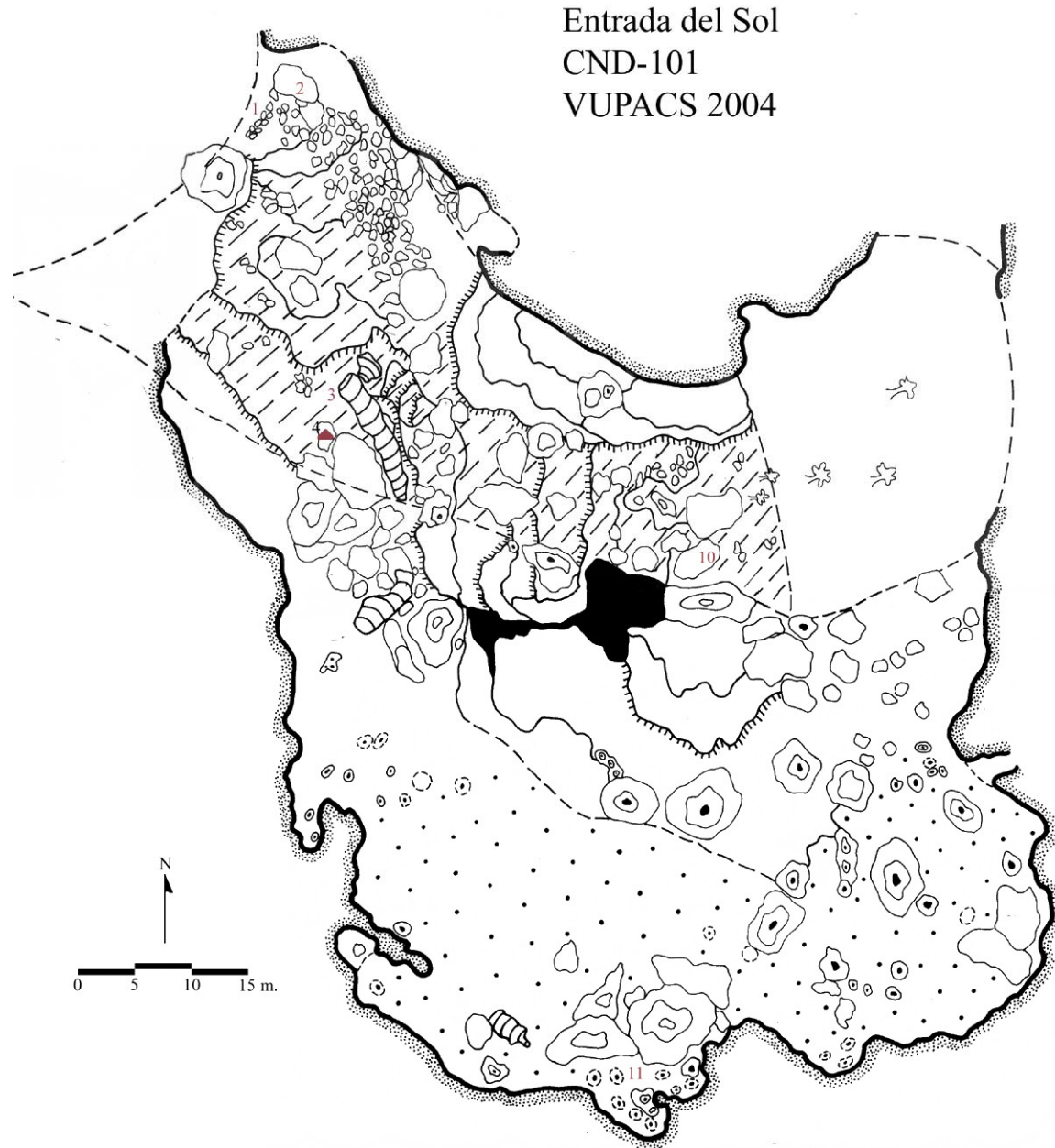
El Venado consists of three different caves, each of which was treated as an independent entity by Dreux. His division was maintained—El Venado no. 1 (CND-211), El Venado no. 2 (CND-213), and El Venado Seco (CND-201). Mico was treated as a single cave by Dreux, although it consists of two river caves separated by over 100 meters of open air. In the present survey each of the caves was assigned a separate number (CND-301 and CND-405), although a detailed investigation of this part of the system is pending. Los Nacimientos, which is composed of two wet caves and a dry one, was again treated as a single entity by Dreux, although in this investigation it has been divided into four sections—Los Nacimientos no. 1 (CND-404), Los Nacimientos no. 2 (CND-401), Los Metates (CND-403, a large dry part of the cave above the river), and Ratón de los Dientes (CND-402).

After a preliminary reconnaissance, each cave was briefly described and assessed for its archaeological importance, and those with more than a scattering of sherds were mapped and catalogued. What follows is a description of all of the investigated caves in the Candelaria system and a summary of the reported and collected material in each feature and excavation unit.

### ***CND-101 Entrada del Sol***

This cave (figure 3-19) was originally included as part of the cave Verónica by Daniel Dreux. It is a small, dry cave that consists of two main sections—a chamber with two large entrances and a narrow tunnel that opens out onto a platform above the main chamber. The main chamber has a steep breakdown slope beginning at the entrances that ends in a flat, semi-dark chamber with a clay floor. Several sherds are scattered on large

pieces of breakdown on the slope. In the lower chamber, a disturbed burial and several hearths are stuck between the wall and a large formation.



**Figure 3- 19: Entrada del Sol**

The tunnel is accessed by a small entrance that leads to a steep, sandy slope. At the base, the passage proceeds on more or less level ground with a series of nooks and

small rooms connecting to it. The majority of archaeological evidence is found in the tunnel—while the main passage is clean of archaeological materials, smashed pots with burnt residue in the interiors are found in each of the associated nooks. A small Quintal Unslipped jar was recovered in a small chamber at the base of the slope.

**CND-101S-1:** An abandoned wall for hunting tepezcuintle.

**CND-101S-2:** Three paintings made with white paint atop a travertine dam—two circles and a crescent moon. They appear to be modern, likely related to early tourism in the system.

**CND-101S-3:** Part of a Dos Arroyos Orange Polychrome bowl.

**CND-101S-4:** Scattered Dos Arroyos Orange Polychrome bowls, some from the same vessel as CND-101S-3.

**CND-101S-5:** Scattered unslipped jar sherds, several of which are burnt in the interior. There is also part of an Águila Red-Orange bowl and an obsidian blade.

**CND-101S-6:** Part of a Dos Arroyos Orange Polychrome bowl; unslipped, burnt sherds; Quintal Unslipped jar necks; and a piece of quartz.

**CND-101S-7:** Scattered Early Classic sherds, mostly from Águila Red-Orange vessels (jars and bowls).

**CND-101S-8:** A single, smashed Águila Red-Orange jar with a burnt interior. A residue sample was scraped from the interior of this vessel with a plastic trowel by Dr. Duncan Cook and is pending analysis to determine what was burnt.

**CND-101S-9:** A single, smashed Quintal Unslipped jar with part of a Z-angled Águila Red-Orange bowl.

**CND-101S-10:** A single Early Classic sherd.

**CND-101S-11:** A heavily-disturbed burial in a clay matrix in one of two dark zones in the cave. It is in a small, natural “crypt” separated from the rest of the room by a large formation and was associated with two small hearths. Duncan Cook took a sediment core through one of the hearths with a PVC pipe in order to determine what was burnt and to try to recover adipose from the burial.

***CND-102 Puente del Mico***

This cave, also classified as part of Verónica originally, is a giant stone arch filled with breakdown. The northern and southern sides have remnants of the original cave wall. No archaeological remains were found in the cave.

***CND-103 Ventana de Seguridad***

Ventana de Seguridad (figure 3-20) is the up-river entrance to Verónica, and the first part of the cave system with a large amount of ritual activity. Sixty-seven features were identified in 2003 and 32 pits were excavated in 2004.

The western part of the cave (figure 3-21) is filled with evidence of cave use, most intensely associated with a platform in front of the entrance. This appears to have been a large ritual stage, with broken incensarios, service vessels, and pieces of Maya ritual garb in a thick layer near the front (with many more artifacts on the floor below the platform) and hearths with burnt unslipped wares in the back. Obsidian blades are found scattered throughout. Above this platform is a higher one accessed by a series of natural steps in a crack between two formations. It is filled with hearths and contains a built altar

in front of a small nook in the back. The chamber appears to have been sealed at the end of the Early Classic through the construction of a vault over the steps.



**Figure 3- 20: Ventana de Seguridad**

In front of the platform on the slope leading down from the entrance, the Maya built a small platform atop a large formation, presumably to create a space for an audience to watch the events unfolding on the platform.

**CND-103S-1:** An Águila Red-Orange jar neck.

**CND-103S-2:** Part of an Águila Red-Orange jar.

**CND-103S-3:** A scattering of Early Classic sherds, including part of a Triunfo Striated jar.

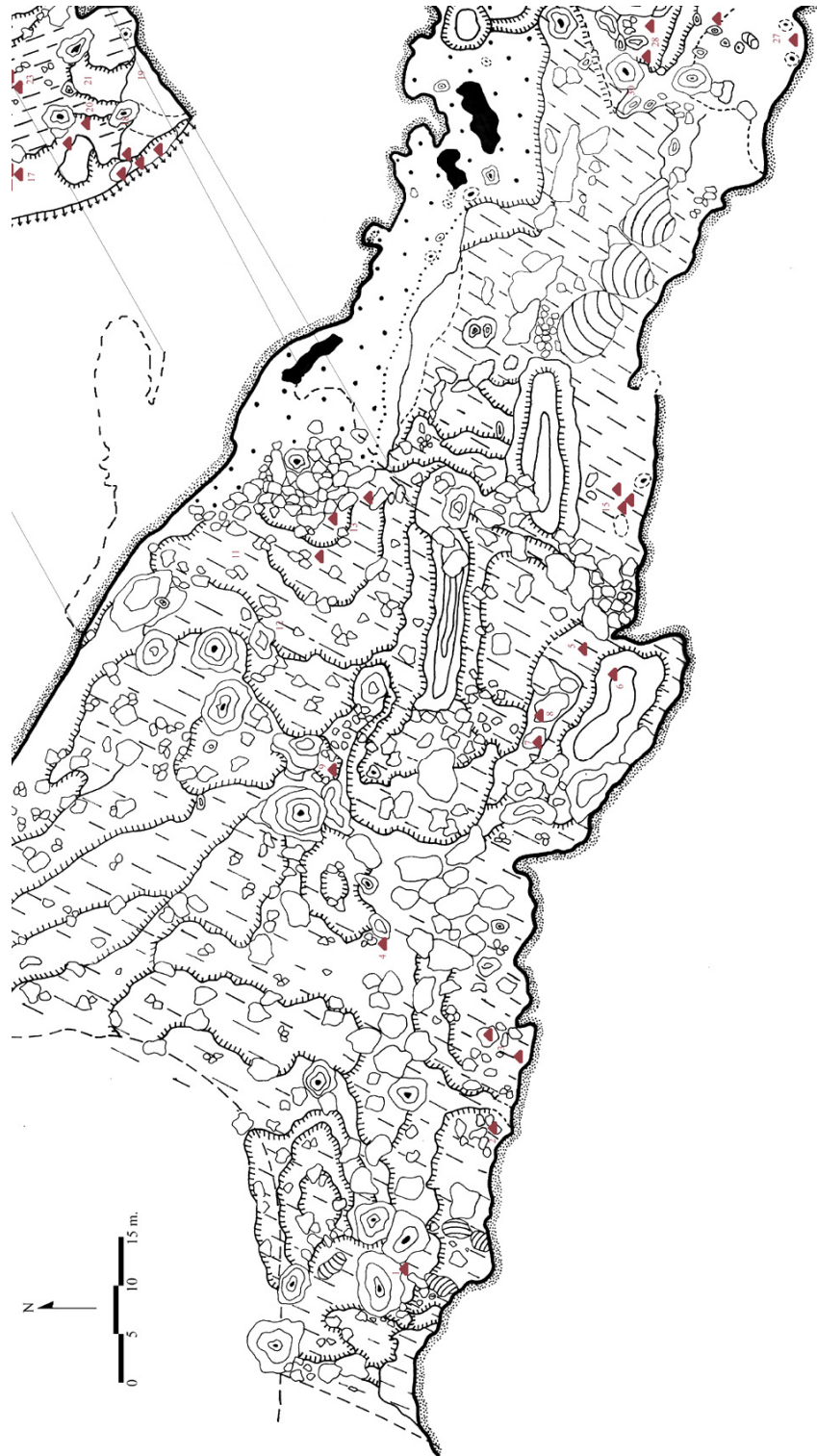
**CND-103S-4:** A scattering of Early Classic sherds atop a piece of breakdown.

**CND-103S-5:** A scattering of Early Classic sherds, both unslipped and polychrome.

**CND-103S-6:** Rim and body sherds from at least four different jars.

**CND-103S-7:** Sherds from an unslipped jar.

**CND-103S-8:** Unslipped sherds.



**Figure 3- 21: Entrance 1, Ventana de Seguridad**  
**CND-103S-9: Scattered unslipped and polychrome sherds.**

**CND-103S-10:** Quixchan Unslipped sherds.

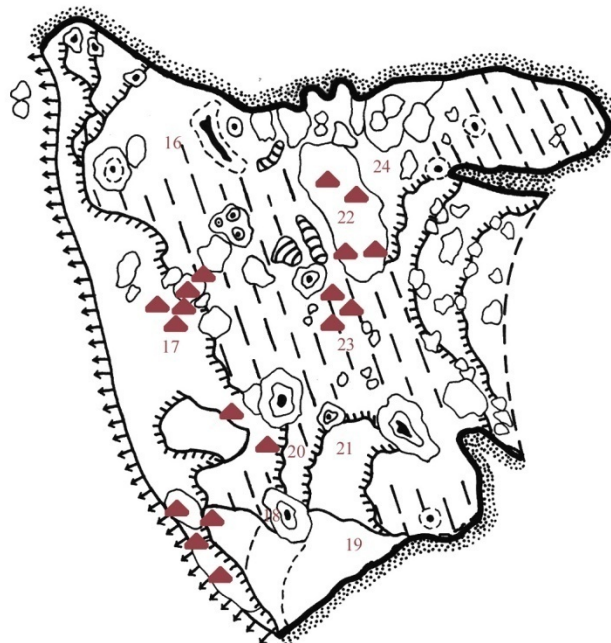
**CND-103S-11:** Scattered polychrome sherds that have fallen from the platform above.

**CND-103S-12:** Burnt, unslipped sherds.

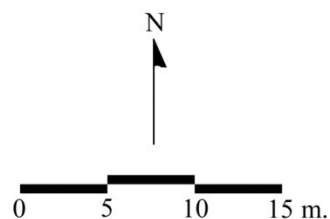
**CND-103S-13:** Unslipped, burnt sherds that have fallen from the platform above.

**CND-103S-14:** Unslipped, burnt sherds.

**CND-103S-15:** Burnt Dos Arroyos Orange Polychrome sherds and several Early Classic monochrome sherds.



CND-103  
Ventana de Seguridad  
Plataforma Ceremonial  
VUPACS 2003



**Figure 3- 22: Platform 1, Ventana de Seguridad**



Across from Entrance 1 is platform 1 (figure 3-22), which contains a high density of remains.

**CND-103S-16:** A dense concentration of Early Classic sherds, including Lucha Incised bowls and Quintal Unslipped incensarios and an obsidian blade. Some of the sherds are burnt.

**CND-103S-17:** A dense concentration of Early Classic unslipped, monochrome, and polychrome sherds. Ten of the sherds in this feature were collected and correspond to bowls (Dos Arroyos Orange Polychrome and Águila Red-Orange), jars (Triunfo Striated, Dos Arroyos Orange Polychrome, and Tinaja Red:Aduana), an incensario (Quintal Unslipped), and a cylinder (Lucha Incised).

**CND-103S-18:** The natural entrance to platform 2—a series of natural steps in a narrow, vertical crack—was sealed off by placing a line of flat stones above the steps.

**CND-103S-19:** A scattering of Early Classic unslipped and polychrome sherds.

**CND-103S-20:** A scattering of sherds.

**CND-103S-21:** A scattering of Early Classic unslipped, monochrome, and polychrome sherds. Some are burnt.

**CND-103S-22:** Scattered Early Classic unslipped and orange-slipped sherds.

**CND-103S-23:** Two sherds, one of which was unslipped.

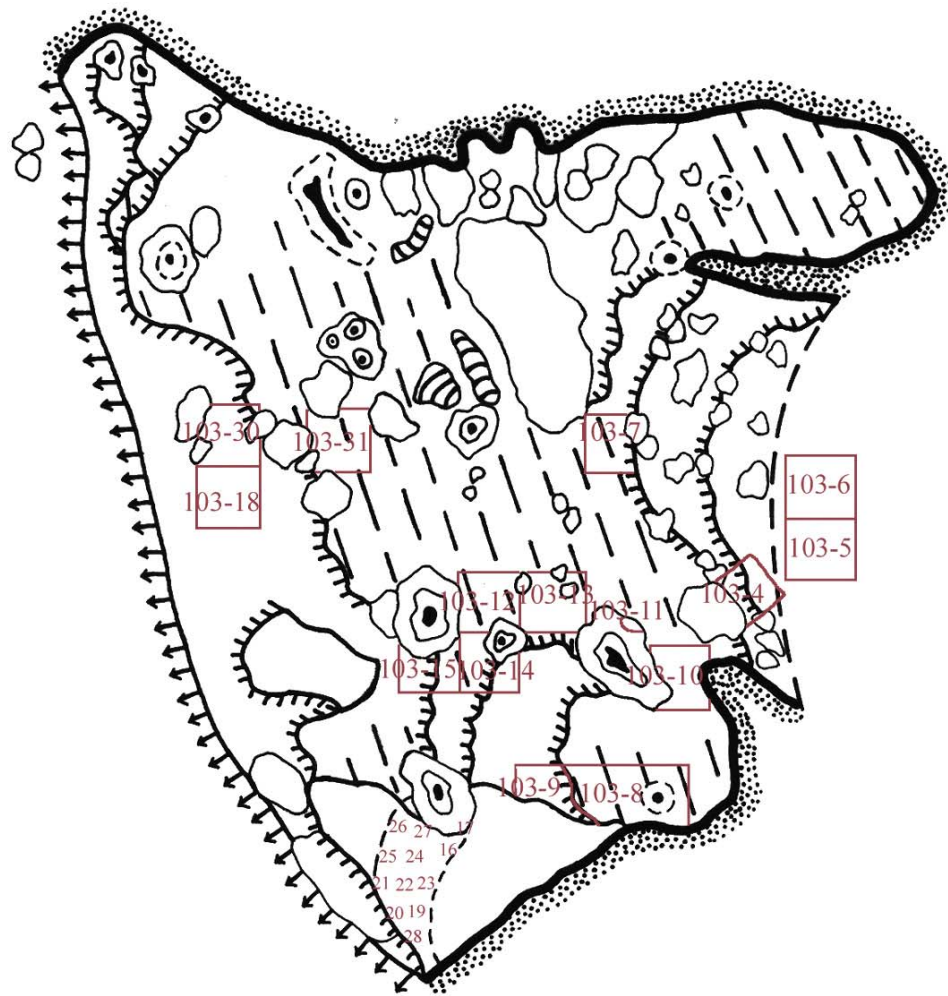
**CND-103S-24:** Sherds covered in calcium carbonate.

**CND-103S-26:** A single, unslipped sherd that is partially covered in calcium carbonate.

**CND-103S-27:** A smashed Águila Red-Orange Z-angled bowl.

**CND-103S-28:** Sherds from two different jars with orange paste.

**CND-103S-29:** A single, unslipped sherd.



CND-103  
 Ventana de Seguridad  
 Plataforma Ceremonial  
 VUPACS 2003



Figure 3- 23: Excavation Units on Platform 1, Ventana de Seguridad

With the exception of the CND-103-1 to 3 (discussed below) all of the excavations in this cave were excavated in platforms 1 (features 3-23). Units CND-103-4 to 7 were dug at the entrance to the platform, CND-103-8 to 10 were dug in a semi-dark chamber next to the entrance, and CND-103-11 to 15, CND-103-18, CND-103-30, and CND-103-31 are all at the edge of the platform on the proposed ritual stage. The rest of the excavations, CND-103-16, CND-103-17, and CND-103-19 to 29, were excavated on platform two, which was the only part of the cave that was completely excavated. Unless otherwise stated, each of the pits were two by two meters.

#### *CND-103-4*

Six sherds from several Dos Arroyos Orange Polychrome vessels (jars and basal-flanged bowls) were recovered on the surface, but no artifacts were recovered in the excavation.

#### *CND-103-5*

Thirty-one Early Classic sherds (part of a Dos Arroyos bowl and Quintal Unslipped and Triunfo Striated jar sherds) and chert flakes in the first several centimeters. A chert flake and a 6.2 centimeter long chopper were also recovered.

#### *CND-103-6*

Sterile.

*CND-103-7*

This pit was placed in a small, natural basin and contained Early Classic ceramics, a chert flake, quartz, bone, and an obsidian prismatic blade. Sixty-five sherds were recovered, mostly from jars (Águila Red-Orange, Quintal Unslipped, and Triunfo Striated), although several bowls (Águila Red-Orange and Dos Arroyos Orange Polychrome) were also present.

*CND-103-8*

This unit was placed atop a large, flat rock in a thin “matrix” of dust. The dimensions were two by three meters and the unit contained parts of three different vessels, two obsidian prismatic blades, and shell. Four hundred and two sherds were recovered, all of which date to the Early Classic and mostly belong to jars (Quintal Unslipped, Quixchan Washed, Triunfo Striated, Águila Red-Orange, Milpa Impressed, and Balanza Black) and bowls (Guachimán Dichrome, Balanza Black, Quintal Unslipped, Quixchan Washed, and Dos Arroyos Orange Polychrome).

*CND-103-9*

This unit was placed beneath CND-103-8. Ceramics, two chert prismatic blades, and obsidian prismatic blades were recovered from a dust matrix. Bedrock was reached at five centimeters.

One hundred and seven sherds were recovered, all of which date to the Early Classic and belong to jars (Quintal Unslipped, Triunfo Striated, and Águila Red-Orange)

or bowls (Balanza Black and Dos Arroyos Orange Polychrome). One Late Classic sherd was found, a Chichicaste Brown bowl base.

*CND-103-10*

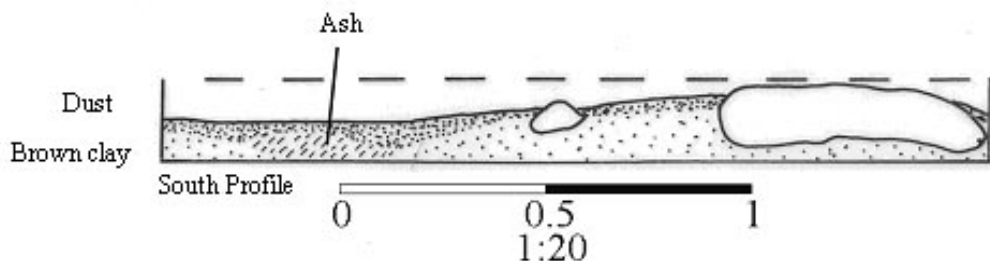
Several sherds were found in the first four centimeters, after which the unit was sterile. The matrix was partially cemented with calcium carbonate. All twelve of the recovered sherds date to the Early Classic and, with the exception of an Águila Red-Orange Z-angled bowl, are from jars (Quintal Unslipped or Águila Red-Orange).

*CND-103-11*

This unit was excavated in a small pocket in the cave wall. Sherds and an obsidian prismatic blade were recovered before hitting sterile at seven centimeters. The 111 recovered sherds date to the Early Classic and belong to jars (Quintal Unslipped, Águila Red-Orange, and Triunfo Striated) and bowls (Águila Red-Orange, Quintal Unslipped, and Dos Arroyos), with a small amount of Balanza Black of indeterminate form.

*CND-103-12* (figure 24)

B. Woodfill  
2005



**Figure 3- 24: CND-1-3-24**

This pit was placed in an area surrounded by three large formations. A large number of sherds (1,049, some of which were burnt), sixteen obsidian prismatic blades, a chert flake, shell, and bone were all recovered. A hearth and a concentration of ash were found at seventeen centimeters.

There is a small amount of Late Preclassic material—a Boxcay Brown plate and a sherd from a bowl of indeterminate type. In addition, there are thirteen Late Classic Delgado Unslipped jar sherds. The material is almost exclusively Early Classic in nature, however, and consists of jars (Quintal Unslipped, Quixchan Washed, Flor Cream:Pétalo, Águila Orange, and Tinaja Red:Aduana) and bowls (Quintal Unslipped, Quixchan Washed, San Bartolo Red-on-Buff, Pita Incised, Buj Incised, Balanza Black, Dos Arroyos Orange Polychrome, and Muqb'ilha Orange).

*CND-103-13*

A single obsidian prismatic blade was recovered.

*CND-103-14*

Ceramics, two chert flakes, eight obsidian prismatic blades, an obsidian flake, shell, and bone were recovered. At seventeen centimeters, more of the hearth from CND-103-12 was uncovered. With the exception of a partial Chichicaste Brown bowl, all of the material (580 sherds) dated to the Early Classic and consists of jars (Quintal Unslipped, Triunfo Striated, Águila Red-Orange, Lucha Incised, and Baclam Orange:Serafín) and bowls (Águila Red-Orange, Balanza Black, and Dos Arroyos Orange Polychrome). Quintal Unslipped cylinders and incensarios were also present.

*CND-103-16*

Both this unit and the subsequent (CND-103-17) were placed in a constructed altar at the back of Platform 2. Five lots were dug—the first three corresponded to three different courses of stones in the wall fronting the hearth, lot four is the retaining wall itself, and lot five was excavated below the wall. Three different matrices were present—a thin layer of dust and guano atop the altar, silty clay mixed with charcoal and ash, and partially cemented, sterile calcium carbonate below. The majority of the artifacts were found in the clay matrix—burnt sherds and four obsidian blades—as well as evidence of several hearths. The retaining wall was placed atop a layer of charcoal.

Thirty-seven sherds were recovered, all of which date to the Early Classic and consist of jars (Quintal Unslipped, Quixchan Washed, and Águila Red-Orange) and bowls (Águila Red-Orange and Balanza Black).

*CND-103-17*

This unit was excavated to 20 centimeters. The artifactual assemblage was similar to that from CND-103-16, but there was less material recovered. Several pieces of shell and an obsidian prismatic blade were also found. The fifteen sherds recovered date to the early Classic and consist of jars (Águila Red-Orange, Quintal Unslipped, and Triunfo Striated) and four Dos Arroyos Orange Polychrome bowl sherds.

*CND-103-18*

Excavations here reached sterile at 10 centimeters. Early Classic sherds from incensarios, polychrome bowls, and monochrome jars were recovered along with an obsidian prismatic blade, two chert flakes, shell, charcoal, part of a human patella, and various animal bones.

One sherd from a Caramba Group jar dated to the Late Preclassic, although the other 210 sherds were Early Classic in date. The sherds belonged to jars (Quintal Unslipped, Quixchan Washed, Triunfo Striated, Dos Arroyos Orange Polychrome, and Tinaja Red:Aduana) and bowls (Quixchan washed, Águila Red-Orange, and Dos Arroyos Orange Polychrome).

*CND-103-19*

Early Classic ceramics were recovered, mostly from a small pothole inside the unit. Eight sherds were recovered belonging to jars (Quintal Unslipped and Águila Red-Orange) and bowls (Águila Red-Orange), with two indeterminate body sherds.

*CND-103-20*

A small pothole was recovered in this unit filled with charcoal, sherds, and guano. Twelve sherds were recovered dating to the Early Classic, each from jars (Quintal Unslipped, Águila Red-Orange, and Triunfo Striated).



*CND-103-21*

Chert, 30 sherds, one quartz flake, and charcoal. The ceramics date to the Early Classic, consisting primarily of jar forms (Quintal Unslipped and Águila Red-Orange) although there was one rimsherd from a Dos Arroyos Orange Polychrome bowl.

*CND-103-22*

Eighteen sherds were recovered from a pothole in the unit, all dating from the Early Classic. With the exception of three indeterminate sherds, all of the vessels were jars (Quintal Unslipped, Triunfo Striated, and Águila Red-Orange).

*CND-103-23*

Charcoal and six sherds from a Quintal Unslipped bowl.

*CND-103-24*

Obsidian, charcoal, and two sherds from a Quintal Unslipped jar.

*CND-103-25*

All of the artifacts in this unit were found in a pothole. Due to the amount of burning present in the pit, it appears to have been used as a hearth. Burnt sherds and charcoal were recovered.

*CND-103-26*

An obsidian flake and charcoal.

*CND-103-27*

Charcoal and 274 sherds were recovered, mostly from Quintal Unslipped jars, although Águila Red-Orange, Tinaja Red:Aduana, and Balanza Black jars were also found. Various bowls (Dos Arroyos Orange Polychrome, Xam Smudged, Águila Red-Orange, and Triunfo Striated) and a cup (Santa Teresa Incised) were present as well.

*CND-103-28*

Charcoal and three sherds (Quintal Unslipped and Águila Red-Orange jar fragments) were recovered.

*CND-103-29*

One jar sherd of indeterminate type was uncovered.

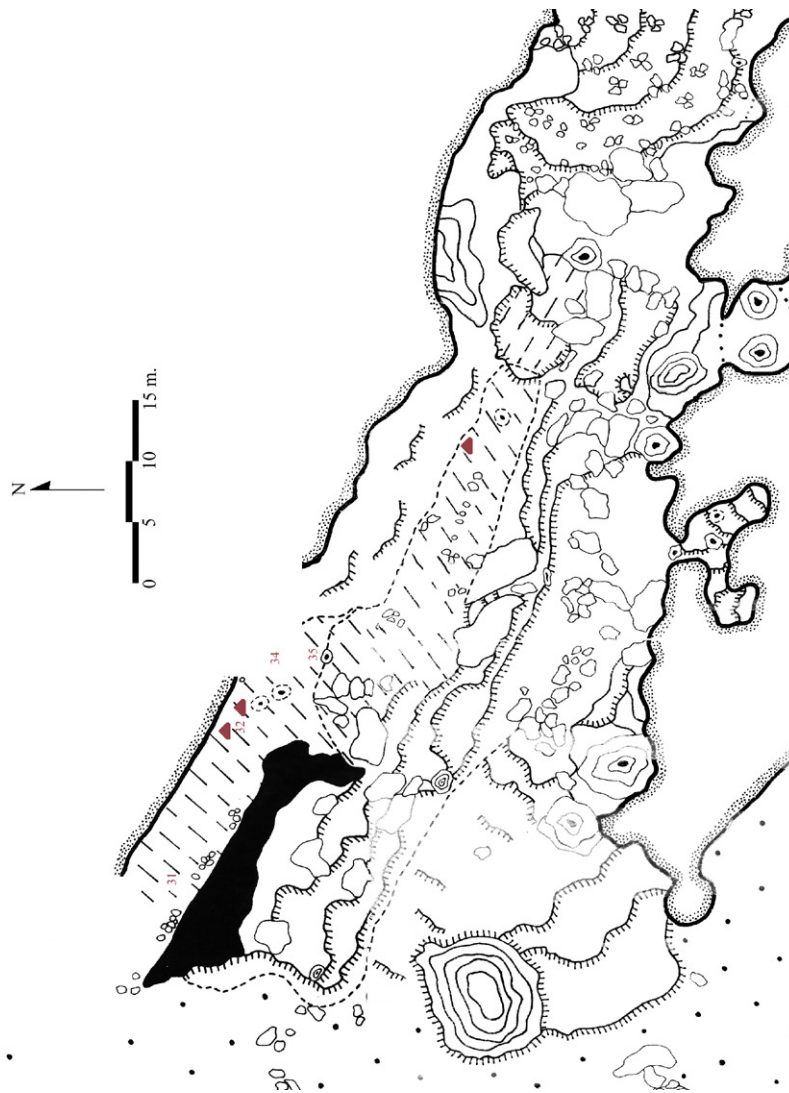
*CND-103-30*

This unit was placed alongside CND-103-18 and CND-103-31. A large hearth was uncovered along with two obsidian prismatic blades, three chert flakes, four quartz flakes, shell, bone, a bead, an unmodified piece of granite, and assorted Early Classic sherds. Charcoal was uncovered near the surface.

All 397 of the sherds date to the Early Classic and were mostly jars (Quintal Unslipped, Quixchan Washed, Triunfo Striated, Águila Red-Orange, Tinaja Red:Aduana, Rosal Incised, and Muqb'ilha' Orange) and bowls (Águila Red-Orange, Baclam Orange:Serafín, and Dos Arroyos Orange Polychrome) with some cylinders (Lucha Incised and Balanza Black) and one sherd from an incensario (Quixchan Washed).

*CND-103-31*

This unit was placed alongside CND-103-18 and CND-103-30. The excavations hit sterile after five centimeters. Only thirty sherds were recovered, all of which dated to the Early Classic. They corresponded to jars (Quintal Unslipped, Águila Red-Orange, Pucte Brown, and Balanza Black) and bowls (Águila Red-Orange, Dos Arroyos, and Balanza Black).



**Figure 3- 25: Ventana de Seguridad, middle section**

Beyond the entrance chamber, the passage bifurcates into a high and a low passage (figure 3-25). The low passage has little archaeological evidence, but a dark tunnel above it which terminates in a cliff is filled with small, burnt corncobs and miniature hearths (each one a small, thin layer of burnt material with a 15-25 cm. diameter).

**CND-103S-30:** Two looters' pits with no associated artifacts.

**CND-103S-31:** Ash, carbon, and several sherds.

**CND-103S-32:** A concentration of burnt corncobs.

**CND-103S-33:** Águila Red-Orange sherds and one unslipped sherd.

**CND-103S-34:** Several large pieces of charcoal.

**CND-103S-35:** Unslipped body sherds and charcoal.

**CND-103S-36:** A series of hand- and foot-holds carved into travertine dams facilitating movement between the river and the rest of the cave.

**CND-103S-37:** Sherds with brown slip.

All of the excavations in this part of the cave were associated with feature CND-103S-32 (figure 3-26) and were two-by-two meter pits with a maximum depth of 20 centimeters.

*CND-103-1*

Burnt corncobs and one burnt Quintal Unslipped jar sherd which was caked with what appears to be copal resin.

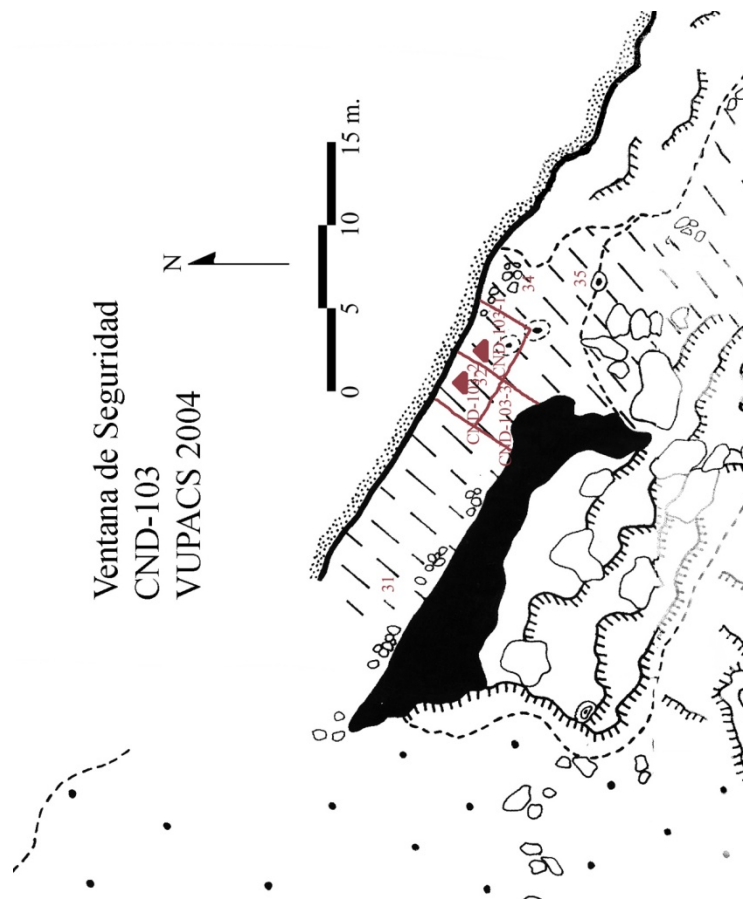


Figure 3- 26: CND-103-1 to 3, Ventana de Seguridad

*CND-103-2*

Resin (likely copal resin) and two small, round hearths were found underneath a fine layer of grey dust. Burnt artifacts (sherds and corncobs) were only found in the first six centimeters of the pit, although animal bones and a piece of greenstone were found up to a depth of sixteen centimeters. A total of five sherds were recovered, corresponding to an Águila Red-Orange cup, and several Águila Red-Orange and Quintal Unslipped jars, and one Late Preclassic sherd from a Sierra Red bowl. Three pieces of chert, a flake and two round balls, were also uncovered underneath the layer of the hearths.

*CND-103-3*

Part of one of the hearths from CND-103-2 was found in this unit. Some bone and sherds were found, but the artifact density was much lower than in CND-103-1 and 2. Three sherds were recovered, belonging to an Águila Group bowl and a Quintal Unslipped vessel of indeterminate form.

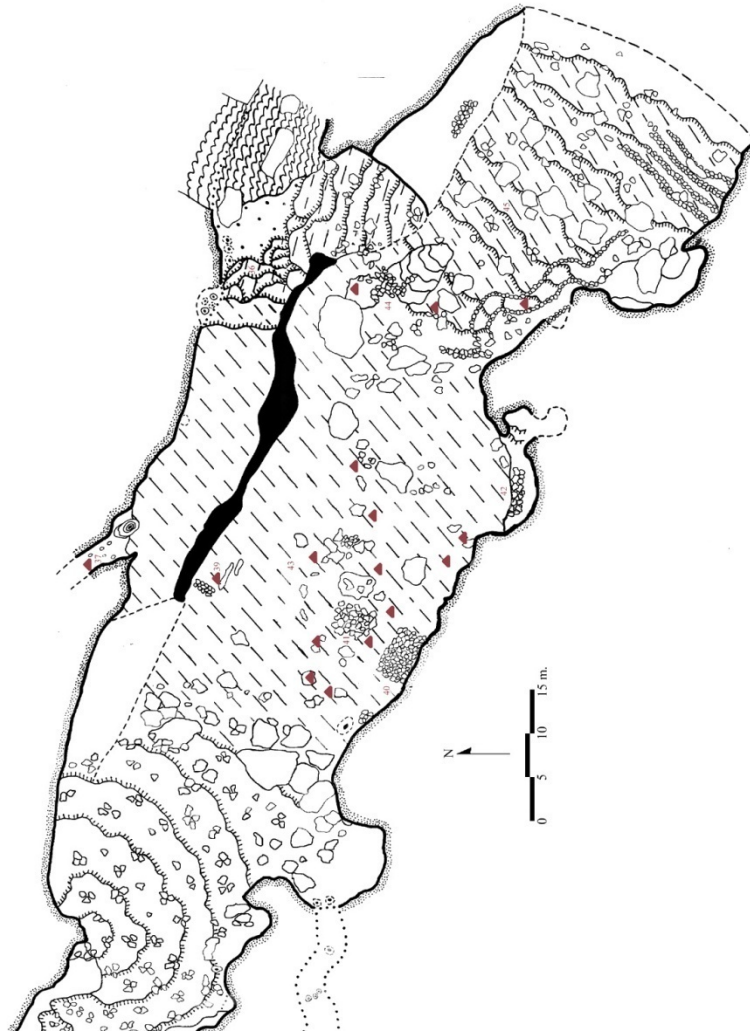
Entrance 2 (figure 3-27) is used by the village of Candelaria Campo Santo as a tourist attraction, following a tightly-defined path on the western edge. This cave was also used for tourism by Dreux in the late 1980s and 1990s, and during this time period he destroyed several “U-shaped” altars and other constructions (c.f. Carot 1989) in order to create a platform for staged performances. The slope from the entrance here was also modified to create a series of platforms, which may or may not have had a basis in ancient Maya constructions (no platforms appeared in Carot’s original map of the chamber).

**CND-103S-38:** A “U”-shaped altar made from breakdown.

**CND-103S-39:** A short wall (about 1.5 meters tall) made from breakdown. A rimsherd and several small speleothems have been placed atop it.

**CND-103S-40:** A platform made out of breakdown. It was not in the original map made by Carot (1989), and according to the guides was used for tourist “spectacles” by Daniel Dreux.

**CND-103S-41:** A rectangular platform. The walls are made of medium-sized rocks; the fill is made from smaller rocks. This might have also been used for spectacles.



**Figure 3- 27: Entrance 2, Ventana de Seguridad**

**CND-103S-42:** A low wall placed atop a travertine dam. The wall seals off access to a small nook behind it where several sherds were found.

**CND-103S-43:** Unslipped sherds with orange or black paste, a bichrome sherd (black on orange), and animal bones.

**CND-103S-44:** A long wall.

**CND-103S-45:** Several scattered sherds.

The rest of the features in the cave are found on platform 3, a high, flat platform separated from the cave entrance by a four-meter-wide chasm. Several walls were built by the ancient Maya, although their actual function is unclear. Patricia Carot (1989:21) noted that they created a “labyrinth” through which one had to pass to get to an interior chamber with a large amount of formations.

Walls are found on three different levels.

**CND-103S-47:** Several monochrome body sherds.

**CND-103S-48:** Unslipped and polychrome body sherds.

**CND-103S-49:** Águila Red-Orange jar body sherds.

**CND-103S-50:** Wall.

**CND-103S-51:** Wall with several burnt, unslipped sherds.

**CND-103S-52:** Wall blocking a depression.

**CND-103S-53:** Wall.

**CND-103S-54:** Burnt and unburnt, sherds that are unslipped or with an orange slip.

**CND-103S-55:** Unslipped sherds, one Dos Arroyos Orange Polychrome:Candelaria sherd, shell, and charcoal.

**CND-103S-56:** Balanza Black body sherds, shell, and charcoal.

**CND-103S-57:** Unslipped sherds (burnt and unburnt), monochrome and polychrome sherds, and an obsidian prismatic blade.

**CND-103S-58:** An unslipped body sherd and a ring-base from an Early Classic bowl.

**CND-103S-59:** Wall.

**CND-103S-60:** A platform made of small stones.

**CND-103S-61:** A charcoal drawing of a monkey similar to those found in B'omb'il Pek.



**CND-103S-62:** Unslipped body sherds (burnt and unburnt), a Dos Arroyos jar rimsherd, and chert.

**CND-103S-63:** A platform consisting of retaining walls made with breakdown and an interior fill of small stones.

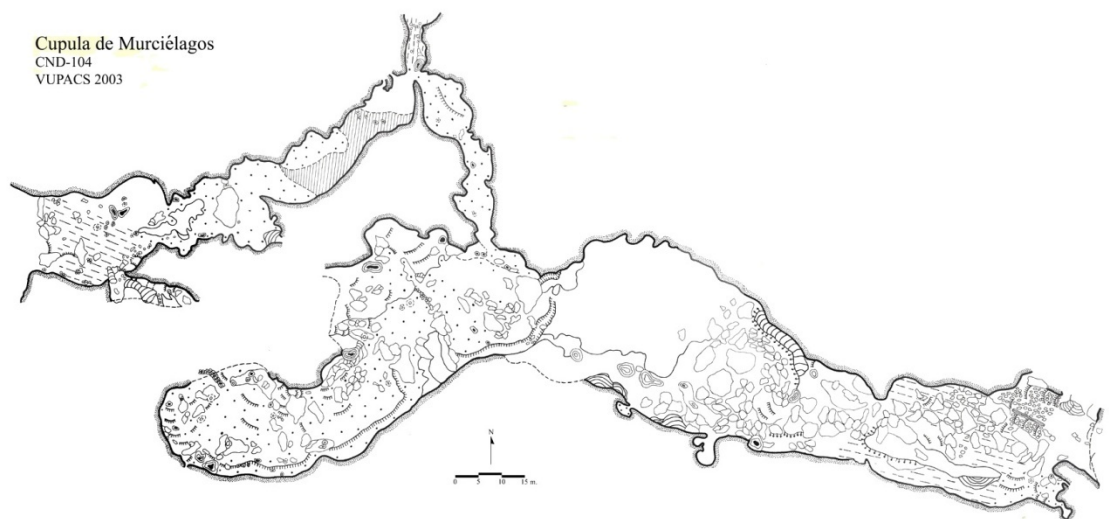
**CND-103S-64:** Small, unslipped body sherds and animal bones.

**CND-103S-65:** A large wall blocking access to platform 2 from the cave entrance.

**CND-103S-66:** Unslipped body sherds.

**CND-103S-67:** Four retaining walls terracing the entrance to the cave. While they might be Precolumbian, they were heavily modified by Dreux in the 1970s.

#### ***CND-104 Cúpula de Murciélagos***



**Figure 3- 28: Cúpula de Murciélagos**

This cave (figure 3-28), the first in the Candelaria system, was also originally classified as part of Verónica. It is a small, dry, walkthrough cave that is being used by the village of Candelaria Campo Santo as a tourist attraction. Cúpula de Murciélagos

consists of a small labyrinth accessible from entrances to the east and west with a small scattering of sherds on the floor. The majority of artifacts are found near the east entrance.

### ***CND-201 El Venado Seco***

This cave (figure 3-29) has a long history of use for tourism, both by Dreux and the village of Mucbilha. It is composed of two parts—a dark, relatively narrow (5-10 meter halls) labyrinth and the “Gran Salón,” a giant hall with an 80-meter ceiling with a large skylight in the center bounded by two enormous entrances. Underneath the entrances and the skylight are large breakdown slopes. Unlike most caves, the whole hall is flooded with natural light during the day and a substantial garden is found underneath the western entrance, with active formations growing through the trees.

There is some archaeological evidence in the caves—sherds are scattered throughout the cave (figure 3-including a probably complete Triunfo Striated jar body in a crawlspace above a small cliff). Three whole rims are cached in various parts of the labyrinth—one on a ledge with a small stalagmite growing in the center, a second atop a large stalagmite, and a third on a cave wall. This is particularly interesting since most of the clusters of sherds in other parts of the cave consist completely of body sherds.

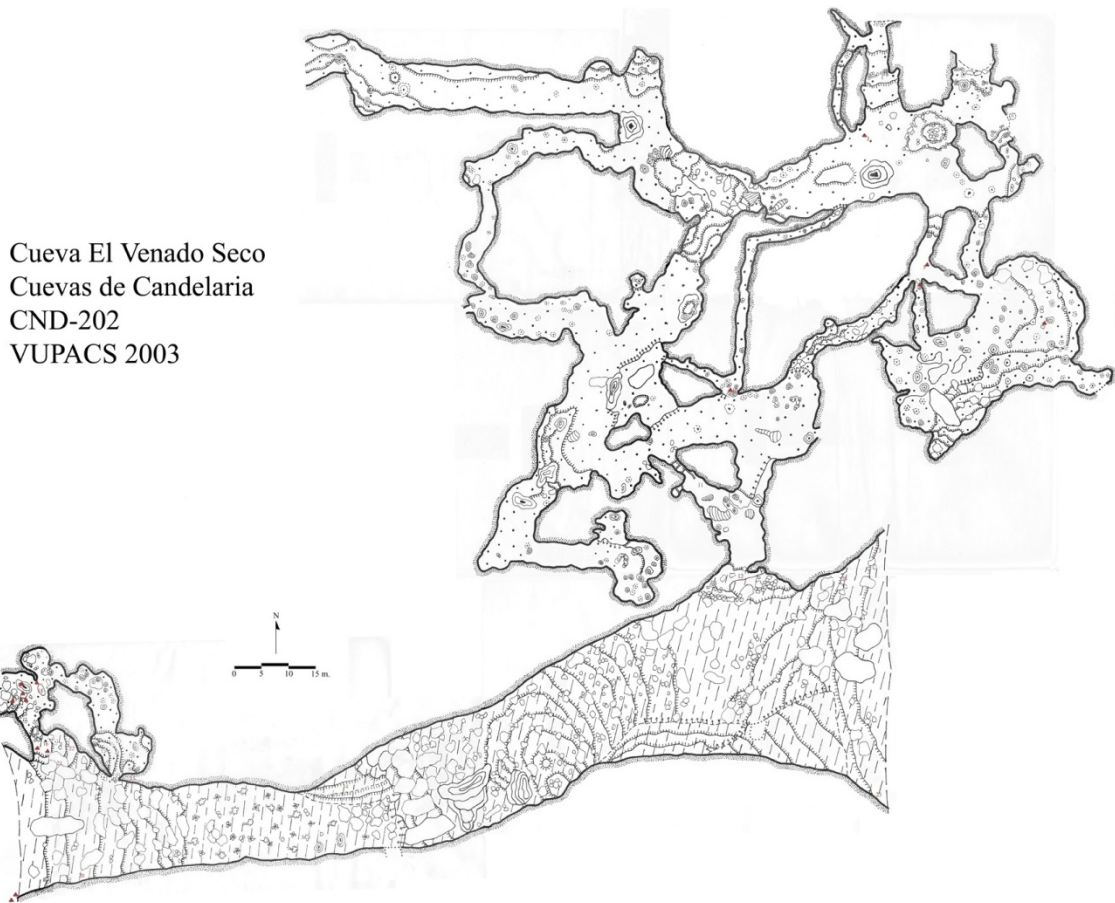
**CND-201S-1:** Abandoned tepezcuintle wall.

**CND-201S-2:** Abandoned tepezcuintle wall.

**CND-201S-3:** A partial unslipped jar.

**CND-201S-5:** Pucte Brown body sherds.

**CND-201S-6:** Pucte Brown and Balanza black body sherds.



**Figure 3- 29: El Venado Seco**

**CND-201S-7:** A Quintal Unslipped rim.

**CND-201S-8:** Two sherds from the same jar.

**CND-201S-9:** A complete rim with a small stalagmite growing through the center of it.

**CND-201S-10:** Triunfo Striated body sherds. While the vessel has not been reconstructed it appears that the entire vessel minus the rim is present.

**CND-201S-11:** Águila Red-Orange body sherds.

**CND-201S-12:** A rimsherd from an Águila Red-Orange jar.

The Gran Salón

**CND-201S-13:** A Quintal Unslipped jar rim.

**CND-201S-14:** Dos Arroyos Orange Polychrome sherds.

**CND-201S-15:** An unslipped rim sherd.

**CND-201S-16:** Scattered Quintal Unslipped and Dos Arroyos Orange Polychrome sherds.

**CND-201S-17:** Scattered unslipped body sherds.

**CND-201S-18:** Scattered small, black-slipped sherds.

**CND-201S-19:** A concentration of red- and black-slipped sherds.

**CND-201S-20:** Unslipped body sherds.

**CND-201S-21:** A concentration of sherds associated with a looters' pit.

**CND-201S-22:** Unslipped, monochrome, and polychrome sherds.

**CND-201S-23:** Balanza Black and Quintal Unslipped sherds.

**CND-201S-24:** Quintal Unslipped jar and incensario sherds.

**CND-201S-25:** Parts of the cranium, coccyx, and other bones of a human skeleton.

They are probably recent and were found in a black plastic bag inside a small crack in the cave entrance.

### ***CND-202 Verónica***

The down-river section of Verónica (figure 3-30) is the most intensely-used cave segment in the Pasión-Verapaz Region. The principal area of use (figure 3-31) is a large entrance on three stepped levels—the river and two staggered platforms on its south side. The upper platform has some artifacts, but it appears that the majority have fallen below. The central platform, which is over 20 m. wide and approximately 350 meters long, is covered with a blanket of artifacts 10-20 cm. deep—ceramics, ash, bone awls, obsidian

blades, broken manos and metates, and chert points left over from countless ritual events (CND-202S-15 to 69, 71 to 89, and 98 to 120). In front of the entrance are two piles of breakdown that may be structures, and excavations in a flat area underneath the dripline revealed a series of stucco floors with a fill composed of breakdown and ritual paraphernalia (including the remains of several human babies).



**Figure 3- 30: Verónica**

Further into the central platform (about 80 meters), several large stalagmitic columns partially seal off a room, which the Maya intensified by building a series of walls to fill in the empty space (CND-202S-91 to 97). On either side of the walls several large hearths are found. A dark room to the south of the hearth chamber has a smashed Águila Z-angled bowl placed atop a ledge of difficult access (CND-202S-70).

**CND-202S-1:** A modern animal skeleton and several Dos Arroyos Orange Polychrome sherds.

**CND-202S-2:** Assorted Early Classic sherds and modern animal bones.

**CND-202S-3:** A Quintal Unslipped rim and scattered Early Classic body sherds.

CND-202  
Cueva Verónica  
VUPACS 2004

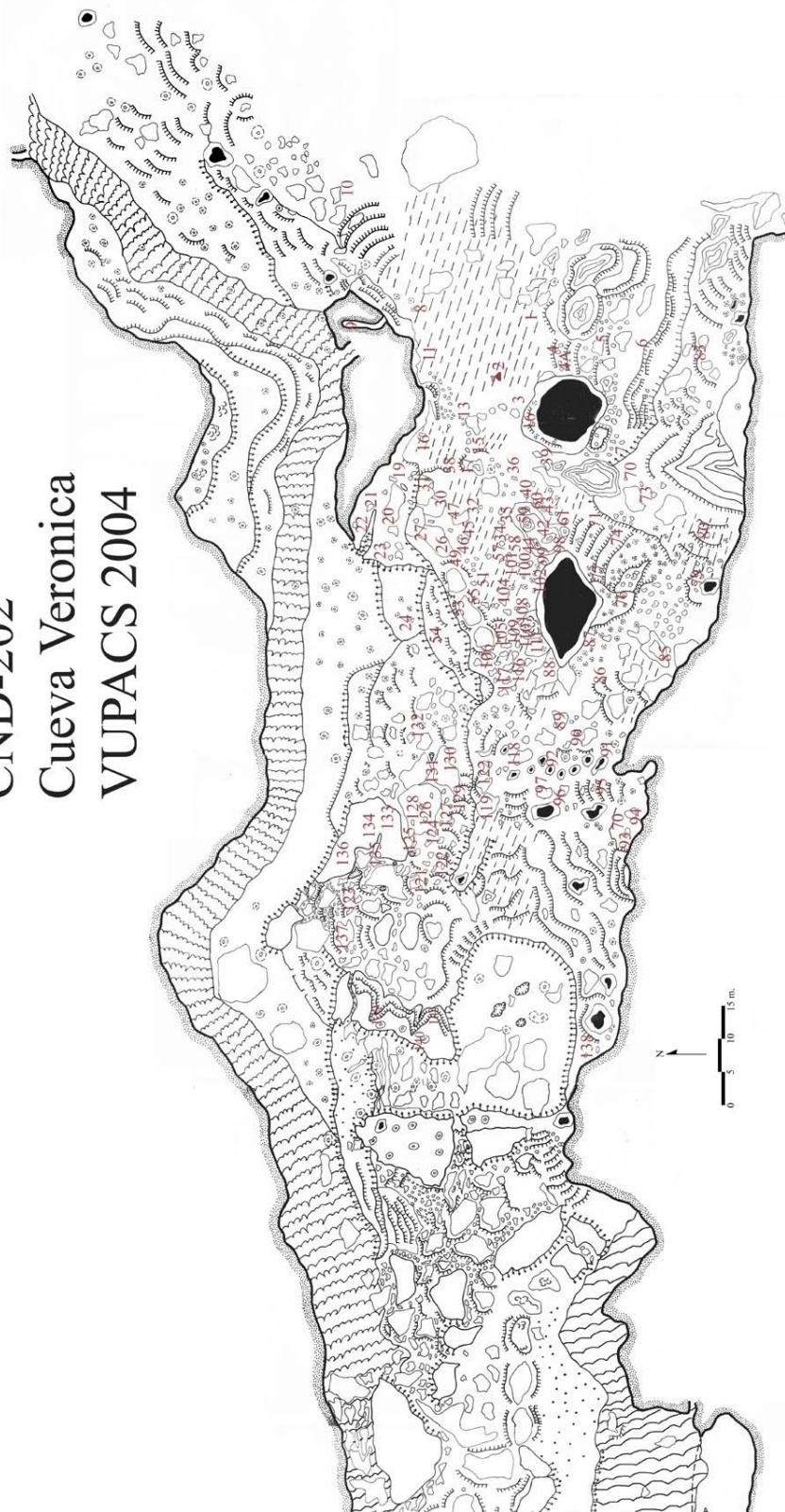


Figure 3- 31: Entrance, Verónica

**CND-202S-4:** Travertine dams that are filled with guano, dust, and Early Classic sherds—unslipped, monochrome, and polychrome.

**CND-202S-5:** Large fragments of Quintal Unslipped and Dos Arroyos Orange Polychrome sherds.

**CND-202S-6:** Animal bones and assorted Early Classic sherds.

**CND-202S-7:** A complete Águila Red-Orange jar rim and assorted Early Classic sherds.

**CND-202S-8:** A large concentration of Early Classic sherds.

**CND-202S-9:** Scattered bones and Dos Arroyos Orange Polychrome sherds.

**CND-202S-10:** A figurine fragment placed atop a rock.

**CND-202S-11:** A flat stuccoed floor with evidence of ballast below. Chert, animal bone, and polychrome ceramics are scattered throughout the area.

**CND-202S-12:** Quintal Unslipped rim sherds,

**CND-202S-13:** A hearth with no associated artifacts. It is likely recent.

**CND-202S-14:** Dos Arroyos Orange Polychrome sherds, several of which might have fallen from the platform above.

**CND-202S-15:** Assorted Early Classic ceramics and part of a probable human femur.

This feature was subjected to surface collection, which resulted in the recovery of 52 sherds. Most of the sherds were jars (Águila Red-Orange, Quixchan Washed, and Muqb'ilha' Orange), bowls (Águila Red-Orange, Baclam Orange:Serafín, Dos Arroyos Orange Polychrome, Lucha Incised, and Pom Smudged), and cylinders (Lucha Incised).

**CND-202S-16:** Assorted Early Classic ceramics.

**CND-202S-17:** Assorted Early Classic ceramics, a broken mano, and animal bone.

**CND-202S-18:** Assorted Early Classic ceramics.

- CND-202S-19:** Assorted Early Classic ceramics including two complete Águila Red-Orange jar rims, human bone, and a plastic bottle.
- CND-202S-20:** Assorted Early Classic ceramics and human or deer vertebra.
- CND-202S-21:** A Quintal Unslipped body sherd.
- CND-202S-22:** Assorted Early Classic ceramics and recent garbage.
- CND-202S-23:** Quintal Unslipped rimsherds.
- CND-202S-24:** Assorted Early Classic ceramics and obsidian prismatic blades.
- CND-202S-25:** Assorted Early Classic ceramics.
- CND-202S-26:** A probable ancient hearth found underneath overhanging pieces of breakdown. Burnt and unburnt sherds have mixed with a large amount of ash and charcoal.
- CND-202S-27:** Assorted Early Classic ceramics and modern animal bones.
- CND-202S-28:** Two burnt Quintal Unslipped jar rims and an Águila Red-Orange jar sherd.
- CND-202S-29:** Unslipped body sherds, likely belonging to the same vessel.
- CND-202S-30:** Assorted Early Classic ceramics.
- CND-202S-31:** Unslipped sherd atop a dead stalagmite.
- CND-202S-32:** Assorted Early Classic ceramics and a broken obsidian prismatic blade. This feature was subjected to surface collection by Walter Burgos, who recovered twelve Dos Arroyos Orange Polychrome bowl sherds.
- CND-202S-33:** A large chert flake with cortex.
- CND-202S-34:** Assorted Early Classic ceramics.
- CND-202S-35:** Assorted Early Classic ceramics.



**CND-202S-36:** Assorted Early Classic ceramics mixed with breakdown and broken speleothems.

**CND-202S-37:** Assorted Early Classic ceramics.

**CND-202S-38:** Assorted Early Classic ceramics.

**CND-202S-39:** Assorted Early Classic ceramics, chert, and various bones, including several large long bones.

**CND-202S-40:** Assorted Early Classic ceramics, bone, and a chert prismatic blade.

**CND-202S-41:** Assorted Early Classic ceramics. Walter Burgos conducted a partial surface collection in this feature, recovering seven Dos Arroyos Orange Polychrome bowl sherds.

**CND-202S-42:** Assorted Early Classic ceramics, animal bone, obsidian prismatic blades, chert cortex, *jute* shells, and charcoal.

**CND-202S-43:** Assorted Early Classic ceramics.

**CND-202S-44:** Assorted Early Classic ceramics and snail shells.

**CND-202S-45:** A single Dos Arroyos sherd placed upon a rock was noted in 2003, although in 2004, 45 sherds were recovered from the same spot—jars (Quintal Unslipped, Tinaja Red:Aduana, and Triunfo Striated), bowls (Águila Red-Orange, Dos Arroyos Orange Polychrome, and Actuncan Orange Polychrome), and a single rim from a Quixchan Washed comal.

**CND-202S-46:** Assorted Early Classic ceramics.

**CND-202S-47:** Assorted Early Classic ceramics.

- CND-202S-48:** Assorted Early Classic ceramics, several of which were burnt, bone, and charcoal. Seven Dos Arroyos Orange Polychrome bowl sherds were collected from this feature by Walter Burgos.
- CND-202S-49:** Assorted Early Classic ceramics, several of which were burnt. One Dos Arroyos Orange Polychrome sherd was collected from this feature by Walter Burgos.
- CND-202S-50:** A large hearth with ash, charcoal, and burnt ceramics.
- CND-202S-51:** Assorted Early Classic ceramics.
- CND-202S-52:** Assorted Early Classic ceramics.
- CND-202S-53:** Assorted Early Classic ceramics, an obsidian projectile point, and bones from several small animals.
- CND-202S-54:** Assorted Early Classic ceramics, animal bones, and snail shells.
- CND-202S-55:** Assorted Early Classic ceramics and a human phalange.
- CND-202S-56:** Assorted Early Classic ceramics and ash.
- CND-202S-57:** Assorted Early Classic ceramics.
- CND-202S-58:** Assorted Early Classic ceramics, shell, and an obsidian prismatic blade.
- CND-202S-59:** Assorted Early Classic ceramics and animal bone.
- CND-202S-60:** Unslipped jar body sherds and at least three Dos Arroyos Orange Polychrome bowl sherds, which were collected by Walter Burgos.
- CND-202S-61:** Assorted Early Classic ceramics
- CND-202S-62:** Assorted Early Classic ceramics, including a complete Águila Red-Orange jar rim.
- CND-202S-63:** Assorted Early Classic ceramics, some of which are burnt, and part of an obsidian blade.

- CND-202S-64:** Assorted Early Classic ceramics including part of a miniature Quintal Unslipped jar, a chert flake, and part of a mano.
- CND-202S-65:** Assorted Early Classic ceramics and animal bone.
- CND-202S-66:** Assorted Early Classic ceramics.
- CND-202S-67:** Assorted Early Classic ceramics, some of which are burnt, and a juvenile cranium.
- CND-202S-68:** Assorted Early Classic ceramics, some of which are covered with calcium carbonate although there are no active formations nearby.
- CND-202S-69:** Assorted Early Classic ceramics.
- CND-202S-70:** A smashed Águila Red-Orange Z-angled bowl found in a small nook with difficult access about 4 meters above the cave floor.
- CND-202S-71:** Assorted Early Classic ceramics.
- CND-202S-72:** Assorted Early Classic ceramics. Four Dos Arroyos Orange Polychrome bowl sherds were recovered by Walter Burgos.
- CND-202S-73:** Assorted Early Classic ceramics.
- CND-202S-74:** Assorted Early Classic ceramics and large bones.
- CND-202S-75:** Assorted Early Classic ceramics.
- CND-202S-76:** Assorted Early Classic ceramics, ash, and charcoal.
- CND-202S-77:** Assorted Early Classic ceramics, some of which were burnt.
- CND-202S-78:** Assorted Early Classic ceramics and *jute* shells.
- CND-202S-79:** Assorted Early Classic ceramics and several hearths, including one three-stone hearth.

- CND-202S-80:** A variety of sherds, mostly Early Classic in date although there is one Saxche or Palmar Orange Polychrome bowl.
- CND-202S-81:** Burnt Águila Red-Orange jar sherds.
- CND-202S-82:** Assorted Early Classic ceramics.
- CND-202S-83:** Assorted Early Classic ceramics and ash.
- CND-202S-84:** Several sherds belonging to an Águila Red-Orange jar.
- CND-202S-85:** Águila Red-Orange, Quintal, and Dos Arroyos sherds; charcoal; and *jute* shells.
- CND-202S-86:** Sherds and a potentially human scapula covered with calcium carbonate.
- CND-202S-87:** Assorted Early Classic ceramics, small animal bones, and an obsidian prismatic blade.
- CND-202S-88:** Jar sherds, charcoal, and fragmented bone.
- CND-202S-89:** Quintal Unslipped jar sherds in a nearly-dark part of the cave.
- CND-202S-90:** A large hearth alongside a thick stalagmitic column.
- CND-202S-91:** A wall constructed in an open area between two large formations.
- CND-202S-92:** A wall constructed in an open area between two large formations.
- CND-202S-93:** Small, thick, unslipped sherds and part of an Águila Red-Orange bowl (potentially the same as CND-202S-70, which is located immediately above).
- CND-202S-94:** Part of an Águila Red-Orange bowl, likely the same as CND-202S-70 and 93.
- CND-202S-95:** Unslipped jar sherds, some of which are covered in calcium carbonate, several Dos Arroyos sherds, and a cut long-bone.
- CND-202S-96:** Burnt Quintal Unslipped, Águila Red-Orange, and Dos Arroyos sherds.

- CND-202S-97:** A large hearth located in front of a series of stalagmites. It is covered with a thick layer of ash, charcoal, and burnt sherds.
- CND-202S-98:** Assorted Early Classic ceramics and one sherd—potentially highland—with negative decoration.
- CND-202S-99:** Assorted Early Classic ceramics.
- CND-202S-100:** Assorted Early Classic ceramics.
- CND-202S-101:** Assorted Early Classic ceramics, including burnt Quintal Unslipped body sherds, and several small animal bones.
- CND-202S-102:** Assorted Early Classic ceramics, ash, charcoal, and *jute* shells.
- CND-202S-103:** Assorted Early Classic ceramics and small animal bones.
- CND-202S-104:** A variety of sherds—while mostly Early Classic there is part of a Pantano Impressed jar. There is also a chert projectile point. This feature was subjected to surface collection, and 85 sherds were recovered, mostly corresponding to jars (Quintal Unslipped, Tinaja Red:Aduana, Quixchan Washed, Águila Red-Orange, Triunfo Striated, and Candelario Appliqué), bowls (Balanza Black, Dos Arroyos Orange Polychrome, and Águila Red-Orange), and cylinders (Santa Teresa Incised). A retouched chert flake was also recovered.
- CND-202S-105:** Assorted Early Classic ceramics, four metate fragments (composing parts of two different metates), and half of a mano.
- CND-202S-106:** Assorted Early Classic ceramics and two mano fragments.
- CND-202S-107:** Assorted Early Classic ceramics, ash, and charcoal.
- CND-202S-108:** Assorted Early Classic ceramics, ash, and charcoal.
- CND-202S-109:** Assorted Early Classic ceramics.

**CND-202S-110:** Assorted Early Classic ceramics and two obsidian prismatic blades.

This feature was subjected to surface collection in 2004 and 42 sherds were recovered, mostly corresponding to jars (Quintal Unslipped, Águila Red-Orange, Quixchan Washed, Tinaja Red-Aduana, Dos Arroyos Orange Polychrome, Balanza Black, Dos Hermanos Red, and Muqb'ilha' Orange), bowls (Dos Arroyos Orange Polychrome, Sierra Red:Vaquera, and Positas Modeled), and cups (Quintal Unslipped and Lucha Incised).

**CND-202S-111:** Assorted Early Classic ceramics. Surface collection was conducted in this feature, which ended in the recovery of five sherds—a Candelario Appliqué jar and several bowls (Balanza Black:Discordia, Águila Red-Orange, and Dos Arroyos Orange Polychrome).

**CND-202S-112:** Assorted Early Classic ceramics, a chert flake, a metate fragment, and charcoal.

**CND-202S-113:** Assorted Early Classic ceramics.

**CND-202S-114:** Assorted Early Classic ceramics and a potential juvenile skeleton.

**CND-202S-115:** Assorted Early Classic ceramics.

**CND-202S-116:** Quintal Unslipped body sherds.

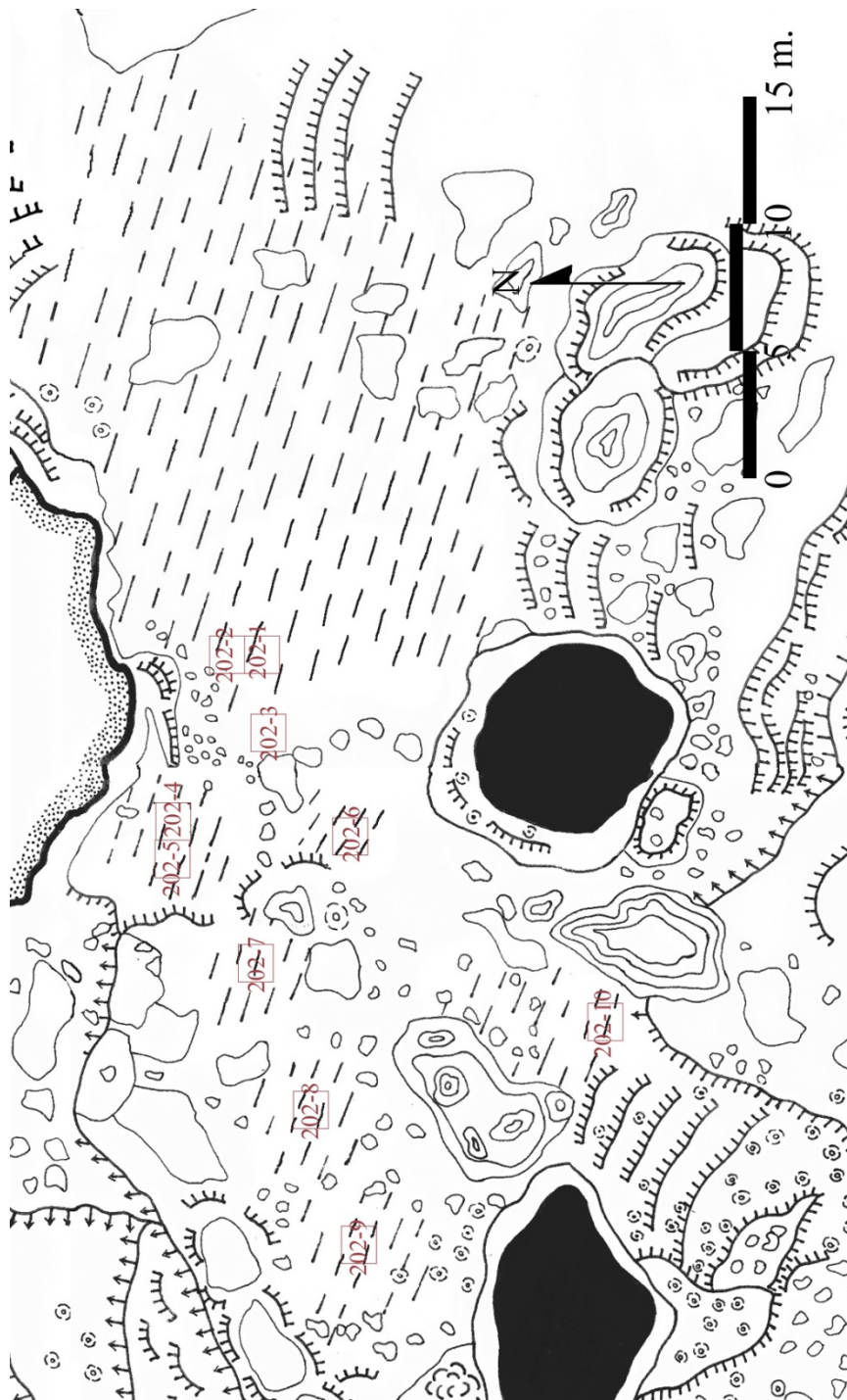
**CND-202S-117:** Assorted Early Classic ceramics.

**CND-202S-118:** Quintal Unslipped body sherds.

**CND-202S-119:** Águila Red-Orange rimsherd.

**CND-202S-120:** Assorted Early Classic ceramics.

Ten units (figure 3-32) were excavated in this part of the cave. All were two by two meters.



**Figure 3- 32: CND-202-1 to 10, Verónica**

*CND-202-1 and CND-202-2*

Both CND-202-1 and CND-202-2 were dug into the artificially flattened cave floor first identified as feature CND-202S-11. Three different plaster floors were

uncovered, each built upon ballast composed of speleothems and breakdown and fill. The fill consisted of Early Classic ceramics, human bones (mostly from young juveniles), chert, a mano and metate fragment, eight quartz flakes, 33 obsidian prismatic blades, and other ceremonial refuse. The base of the unit (between one meter and 1.2 meters) was mostly composed of *jute* shells, crab claws, and bivalves. Two oliva “tinklers” were also recovered.

A total of 1,873 sherds were recovered, belonging to jars (Quintal Unslipped, Águila Red-Orange, Baclam Orange:Serafin, Quixchan Washed, Tinaja Red:Aduana, Muqb’ilha’ Orange, Dos Arroyos Orange Polychrome, Balanza Black, Pucte Brown, and Sacluc Black and Red) and bowls (Balanza Black, Subin Red:Bocal, Quixchan Washed, Dos Arroyos Orange Polychrome, Fama Buff, Muqb’ilha’ Orange, Milpa Impressed, Pucte Brown, San Bartolo Red-on-Buff, Argentina Champhered, and Chipilin Red). Parts of several cylinders (Pom Smudged and Águila Red-Orange) and a Balanza Black lid were also found. Several sherds dating to the early part of the Early Classic and the Late Preclassic were also found, including part of a shoe pot (Quintal Unslipped) and several Baclam Orange, Sierra Red, and Flor Cream sherds.

A range of chert artifacts was found—39 flakes, thirteen prismatic blades, three drills, two cores, and a round ball. In addition to the 33 obsidian prismatic blades, excavations revealed two obsidian flakes, one with some cortex present.

### *CND-202-3*

This unit was dug several meters into the cave from the previous units underneath feature CND-202S-13. Several hearths (almost certainly modern) were found on the



surface of the unit and below them were found burnt ceramics, a quartz flake, part of a mano and metate, and human bones, including a phalange and a scapula. A plaster floor was uncovered at 40 centimeters, and another was found at 58 centimeters. The fill, as in CND-202-1 and 2, consisted largely of ceremonial refuse and human bone. Obsidian prismatic blades, Early Classic ceramics, and quartz were found throughout the unit. The base of the unit (to 70 centimeters) consisted of a level of *jute* shells, crab claws, and bivalves.

A total of 1,138 sherds were recovered. Most of them were from jars (Quintal Unslipped, Triunfo Striated, Águila Red-Orange, Tinaja Red:Aduana, Quixchan Washed, Balanza Black, Candelario Appliqué, Dos Arroyos Orange Polychrome, Cubierta Impressed, and Muqb'ilha' Orange) and bowls (Dos Arroyos Orange Polychrome, Quixchan Washed, Balanza Black, Chipillin red, Águila Red-Orange, Quintal Unslipped, San Bartolo Red-on-Buff, Muqb'ilha' Orange, and Chimuelo Dichrome), although there were several cylinders (Pucte Brown, Balanza Black, and Santa Teresa Incised) and part of a Balanza Black slab-footed tripod vessel. There were several Late Classic types present near the top of the unit (Gladiola Red, and Delgado Unslipped), and part of an Ixcancario tetrapod plate was also recovered.

A variety of chert artifacts was found—sixteen flakes, three prismatic blades, and a drill. Thirty-six obsidian prismatic blades and an obsidian flake with cortex were also recovered.

The rest of the units excavated in this cave were between 11 and 15 centimeters deep.

#### *CND-202-4*

Both CND-202-4 and 5 were dug to investigate CND-202S-16. Early Classic ceramics, a stone chopper, a quartz flake, charcoal, seven obsidian prismatic blades, a mano fragment, and nine chert flakes were recovered. The 1,392 recovered sherds correspond mostly to jars (Quintal Unslipped, Águila Red-Orange, tinaja Red:Aduana, Quixchan Washed, Balanza Black, and Silvano Incised) and bowls (Águila Red-Orange, Balanza Black, Dos Arroyos Orange Polychrome, Sierra Red:Vaquera, Chipilin Red, Quixchan Washed, Pom Smudged, Silvano Incised, Dos Arroyos Orange Polychrome, Caldero Buff, San Blas Red-on-Orange, Pom Smudged, and Muqb'ilha' Orange), although there are several examples of spiked incensarios (Candelario Applique), comales (Quintal Unslipped), and cylinders (San Blas Red-on-Orange, Santizo Appliqué, Urita Gouged-Incised, Lucha Incised, Balanza Black, and Águila Red-Orange). There is a single sherd dating to the Middle Preclassic (Muxanal Red-on-Cream).

#### *CND-202-5*

Both CND-202-4 and 5 were dug to investigate CND-202S-16. Early Classic ceramics, including a Balanza Group cylinder lid and an appliquéd Tlaloc face were found. A bead, part of a necklace, charcoal, twelve obsidian prismatic blades, and a greenstone adze were also recovered. Most of the 637 recovered ceramics corresponded to jars (Quintal Unslipped, Águila Red-Orange, Triunfo Striated, Quixchan Washed, Tinaja Red:Aduana, Muqb'ilha' Orange, Candelario Appliqué, Pita Incised, and Milpa Imressed) and bowls (Dos Arroyos Orange Polychrome, Águila Red-Orange, Chipilin Red, Lucha Incised, Xam Incised, Papa Dichrome, and Buj Incised), although there were

examples of barrels and a shoe pot (both Quintal Unslipped) and a cylinder lid (Balanza Group). There was also a Late Classic Cambio Unslipped jar rim.

A variety of lithic artifacts were found. The chert artifacts include seven flakes, two prismatic blades, a core, and a chopper.

#### *CND-202-6*

This unit was placed to investigate the feature CND-202S-15. Early Classic ceramics, sixteen obsidian prismatic blades, charcoal, and quartz.

The 794 recovered sherds normally correspond to jars (Quintal Unslipped, Águila Orange, Tinaja Red:Aduana, Dos Arroyos Orange Polychrome, Muqb'ilha' Orange, Triunfo Striated, Quixchan Washed, and Balanza Black) and bowls (Dos Arroyos Orange Polychrome, Balanza Black, Chimuelo Dichrome, Caldero Buff Polychrome, Quintal Unslipped, and Pom Smudged). One of the sherds dates to the Middle Preclassic (Muxanal Red-on-Cream).

Two chert prismatic blades, a chert drill, a scraper, and a chert flake were found.

#### *CND-202-7*

This unit was excavated to investigate the feature CND-202S-17. Early Classic ceramics, eleven obsidian prismatic blades, charcoal, a chert prismatic blade, a chert flake, and fragments of two manos and metates.

Eighty-eight sherds were recovered, which were mostly jars (Quintal Unslipped, Águila Red-Orange, Tinaja Red:Aduana, Cubierta Impressed, Balanza Black, and Muqb'ilha' Orange), although several bowls (Águila Red-Orange, Quintal Unslipped,

and Dos Arroyos Orange Polychrome) and a cylinder (Balanza Black) were also uncovered.

*CND-202-8*

This unit was excavated to investigate CND-202S-45. Early Classic ceramics, nineteen obsidian prismatic blades, a chert flake, charcoal, greenstone, and a ceramic disk.

The 81 recovered sherds correspond to jars (Tinaja Red:Aduana, Quintal Unslipped, Balanza Black, and Águila Red-Orange) and bowls (Dos Arroyos Orange Polychrome, Águila Red-Orange, Balanza Black, Chipilin Red, Lechugal Incised:Miranda, Balanza Black, and Argentina Champhered) with several fragments of Quintal Unslipped shoe pots. There are also several Late Preclassic sherds (Iberia Orange and Achiotes Unslipped).

*CND-202-9*

This unit was excavated to investigate CND-202S-104. Early Classic ceramics, 40 obsidian prismatic blades, one obsidian flake, a ceramic disk, parts of a mano and a metate. There are 2,687 sherds, mostly corresponding to jars (Quintal Unslipped, Águila Red-Orange, Quixchan Washed, Tinaja Red:Aduana, Pucte Brown, Balanza Black, and Triunfo Striated) and bowls (Pucte Brown, Paradero Fluted, Dos Arroyos Orange Polychrome, Águila Red-Orange, Balanza Black, Pom Smudged, Chipilin Red, Argentina Champhered, Chorro Fluted, Actuncan Orange Polychrome, Quintal Unslipped, San Blas Red-on-Orange, Santa Teresa Incised, Papa Dichrome, Pom Smudged, and Fama Buff),

although there were also several cylinders (Dos Arroyos Orange Polychrome, Lucha Incised, Santa Teresa Incised, and Pucte Brown).

Several chert artifacts were found—nine flakes, four prismatic blades, and a scraper.

#### *CND-202-10*

This unit was excavated to investigate the feature CND-202S-71. This unit consists of artifacts that fell from the platform above.

A total of 1,115 sherds were recovered corresponding to jars (Quintal Unslipped, Águila Red-Orange, Pucte Brown, Quixchan Washed, Muqb'ilha' Orange, Tinaja Red:Aduana, Triunfo Striated, Candelario Appliqué, Dos Arroyos Orange Polychrome, and Santa Teresa Incised) and bowls (Águila Red-Orange, Balanza Black, Quintal Unslipped, Dos Arroyos Orange Polychrome, Pucte Brown, Pom Smudged, Chipilin Red, Pucte Group Plano-Relieve, and Balanza Black), although several sherds from incensarios (Quintal Unslipped) and cylinders (Lucha Incised and Paradero Fluted) were also found.

Six chert flakes and a chert prismatic blade were found along with 46 obsidian prismatic blades and an obsidian flake.

The following features (see figure 3-31) are found in a low platform near the end of the cave's twilight zone; at least one of the features (CND-202S-139) is low enough to have evidence of periodic flooding from the river.

**CND-202S-121:** Águila Red-Orange rim sherd.

**CND-202S-122:** Unslipped sherds.

- CND-202S-123:** Orange-slipped, Early Classic ring-base.
- CND-202S-124:** Dos Arroyos Orange Polychrome sherds, a fragment of a large obsidian biface, and a polished metate fragment.
- CND-202S-125:** Assorted Early Classic ceramics.
- CND-202S-126:** Assorted Early Classic ceramics.
- CND-202S-127:** Assorted Early Classic ceramics, mostly burnt.
- CND-202S-128:** Assorted Early Classic ceramics.
- CND-202S-129:** Assorted Early Classic ceramics.
- CND-202S-130:** Assorted Early Classic ceramics, bivalve shell, an obsidian prismatic blade, ash, charcoal, and ribs (probably animal).
- CND-202S-131:** Assorted Early Classic ceramics.
- CND-202S-132:** Assorted Early Classic ceramics and obsidian prismatic blades. This lot has evidence of periodic flooding.
- CND-202S-134:** Assorted Early Classic ceramics (including several whole Águila Red-Orange rims) and part of a mano.
- CND-202S-135:** Assorted Early Classic ceramics.
- CND-202S-136:** Assorted Early Classic ceramics and an obsidian prismatic blade.
- CND-202S-137:** Assorted Early Classic ceramics.
- CND-202S-138:** Two paintings, one of a moon and the other of a sun. They are likely recent.
- CND-202S-139:** Quintal Unslipped sherds. There is evidence of periodic flooding in this feature.
- CND-202S-140:** Quintal Unslipped sherds.

CND-202S-141: burnt Quintal Unslipped sherds and a hearth.



Figure 3- 33: Sala Trasera, Verónica

Several hundred meters into the cave, the river becomes shallow (under 40 centimeters deep) and bifurcates, with the majority of the water disappearing into a sump; the rest of the water flows past the platforms described above and leaves the cave at the principal entrance. It is possible to walk alongside the river bank for approximately 100 meters, at which point the Maya built a stone path into the riverbed, which leads to a slope up to a large platform. This stone path is located underneath a small skylight and a 40-meter cliff, from which it is possible to access Ventana de Verónica (CND-202A).

The ledge the platform leads to (figure 3-33) was used by the Maya for various ritual activities—there are large fragments of unslipped jars scattered throughout the platform as well as hearths and a greenstone adze.

**CND-202S-142:** A stone-lined path set into the bed of the Río Candelaria. It is at a very shallow part of the river—during the dry season the water only a few centimeters deep here. The path leads to the Sala Trasera.

**CND-202S-143:** Quintal Unslipped sherds.

**CND-202S-144:** Burnt Águila Red-Orange and Quintal Unslipped body sherds.

**CND-202S-145:** Dos Arroyos Orange Polychrome sherds and burnt Quintal Unslipped jar fragments.

**CND-202S-146:** Águila Red-Orange jar sherds.

**CND-202S-147:** Águila Red-Orange jar sherds.

**CND-202S-148:** Large fragments of a Águila Red-Orange Z-angled bowl with burnt organic residue in the interior and several large, burnt unslipped body sherds.

**CND-202S-149:** A partial Quintal Unslipped jar.

**CND-202S-150:** Large Quintal Unslipped jar fragments and part of a Dos Arroyos jar.



**CND-202S-151:** Body sherds covered with calcium carbonate and several sherds from a Saxche-Palmar Orange Polychrome bowl.

**CND-202S-152:** Unslipped body and rim sherds covered with calcium carbonate.

**CND-202S-153:** Quintal Unslipped jar fragments and part of a Saxche-Palmar Orange Polychrome bowl.

**CND-202S-154:** Large fragments of a Quintal Unslipped bowl; small, unslipped body sherds; and a chert core.

**CND-202S-155:** Quintal Unslipped and Águila Red-Orange sherds.

**CND-202S-156:** Quintal Unslipped and Águila Red-Orange sherds.

**CND-202S-157:** Águila Red-Orange, Dos Arroyos, and Triunfo Striated sherds (some of which were burnt) and charcoal.

**CND-202S-158:** Balanza Black and burnt Quintal Unslipped sherds, charcoal, and obsidian prismatic blades.

**CND-202S-159:** Assorted Early Classic ceramics, an animal mandible, and an obsidian prismatic blade.

**CND-202S-160:** Burnt and unburnt ceramics and ash.

**CND-202S-161:** Assorted Early Classic ceramics, charcoal, burnt animal bone, and a concave shell disk.

**CND-202S-162:** Large, burnt, unslipped sherds.

**CND-202S-163:** Unslipped body sherds covered with calcium carbonate.

**CND-202S-164:** Dos Arroyos Orange Polychrome and Triunfo Striated sherds.

**CND-202S-165:** Águila Red-Orange sherds, burnt Quintal Unslipped sherds, and charcoal.

**CND-202S-166:** Quintal Unslipped sherds, some of which are burnt. There is a hearth as well.

**CND-202S-167:** A smashed shoe-pot and a concentration of sherds covered with calcium carbonate.

**CND-202S-168:** Small Quintal Unslipped and Águila Red-Orange sherds.

**CND-202S-170:** Sherds from Triunfo Striated jars and Águila Red-Orange Z-angled bowls.

**CND-202S-171:** Assorted Early Classic ceramics in a clay matrix.

**CND-202S-172:** Águila Red-Orange and Pucte Brown sherds and a small jade adze partially covered with calcium carbonate.

**CND-202S-173:** Burnt, unslipped body sherds.

**CND-202S-174:** Burnt Quintal Unslipped jar sherds. This area has evidence of periodic flooding.

**CND-202S-175:** Burnt unslipped body sherds.

**CND-202S-176:** Sherds with fine paste and burnt interiors.

**CND-202S-177:** A large Águila Red-Orange body sherd, several small sherds, and charcoal.

**CND-202S-178:** Burnt and unburnt Quintal Unslipped jar sherds.

### ***CND-202A Ventana de Verónica***

Ventana de Verónica (figure 3-34) is part of Verónica, although it was treated as a sub-operation for practical reasons—while it connects to the principal cave, significant rope-work is required to move enter it, necessitating a 40-meter climb.

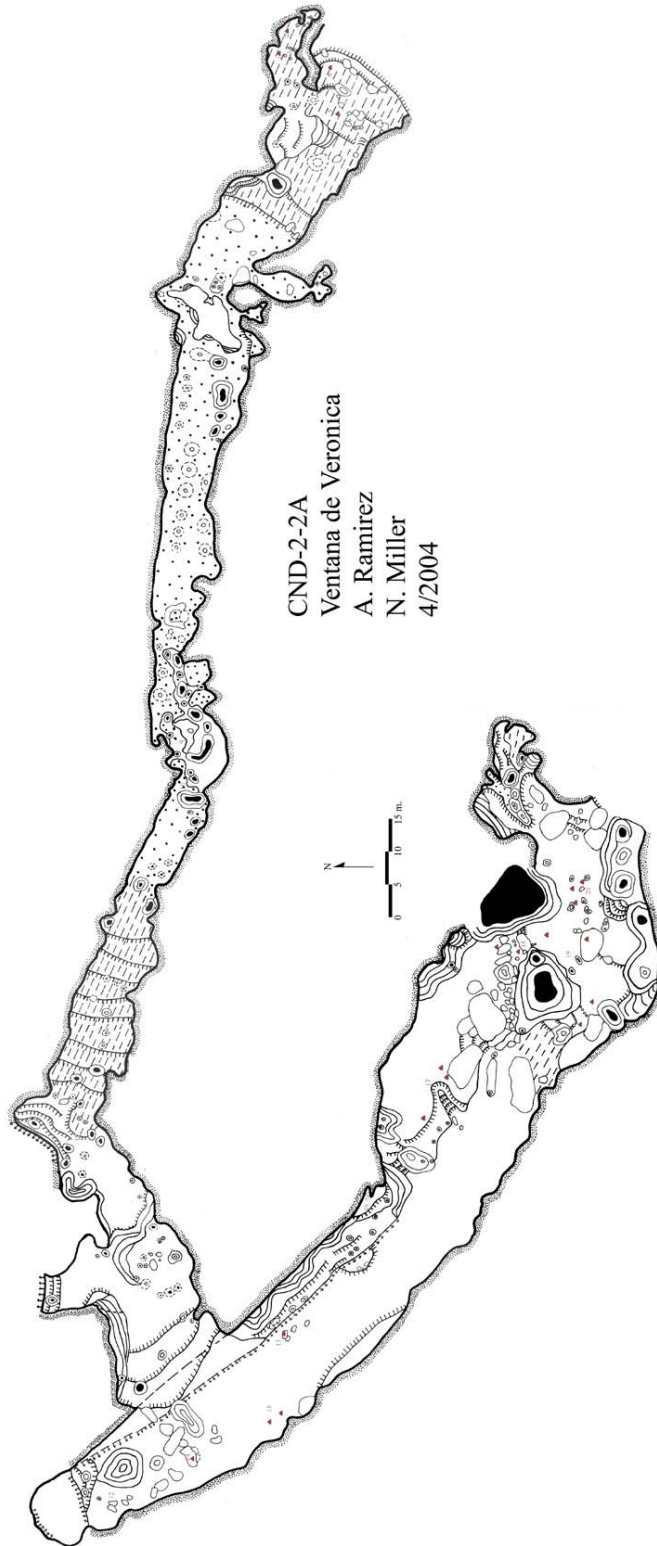


Figure 3- 34: Ventana de Verónica

The cave consists of two passages that meet at a roughly twenty-degree angle above the river. The passage to the north contains a scattering of sherds at the entrance and a series of stone lines in front of a small chamber, inside of which were found human remains. Further in, the tunnel becomes clogged by a series of dangling columns, which presently end approximately a meter above the ground (which occurred when the clay floor underneath them washed away [Oliphant pers. comm. 2005]). A greenstone adze was placed on one of them, and upon a nearby column the Maya “painted” a double-negative handprint.

The southernmost passage has a three-meter-tall ledge on the northern edge that traverses the majority of the hall. Several meters above the ledge in a small nook, one of the workmen discovered two whole Quintal jars, one of which had a large sherd atop it serving as a lid.

**CND-202A-1:** Assorted Early Classic ceramics and charcoal.

**CND-202A-2:** Unslipped and monochrome sherds and several small animal bones.

**CND-202A-3:** Two partially destroyed stone walls blocking access to the interior of the tunnel.

**CND-202A-4:** Assorted Early Classic ceramics.

**CND-202A-5:** Assorted Early Classic ceramics.

**CND-202A-6:** Assorted Early Classic ceramics.

**CND-202A-7:** Assorted Early Classic ceramics.

**CND-202A-8:** Assorted Early Classic ceramics.

**CND-202A-9:** A greenstone adze was placed atop the base of a hanging column.

**CND-202A-10:** A negative painting with the visible outline of the thumb and index finger of both of the artist's hands forming a triangle.

**CND-202A-11:** Several Águila Red-Orange sherds.

**CND-202A-12:** Assorted Early Classic ceramics and charcoal.

**CND-202A-13:** Sherds with an orange paste.

**CND-202A-14:** Assorted Early Classic ceramics.

**CND-202A-15:** Two large jars—one Quintal Unslipped and one Triunfo Striated, were placed in a large nook several meters above the cave floor. Several body sherds were also found in the nook.

**CND-202A-16:** Assorted Early Classic ceramics.

**CND-202A-17:** Assorted Early Classic ceramics.

**CND-202A-18:** Dos Arroyos Orange Polychrome and other fine sherds.

**CND-202A-19:** Assorted Early Classic ceramics.

**CND-202A-20:** Assorted Early Classic ceramics.

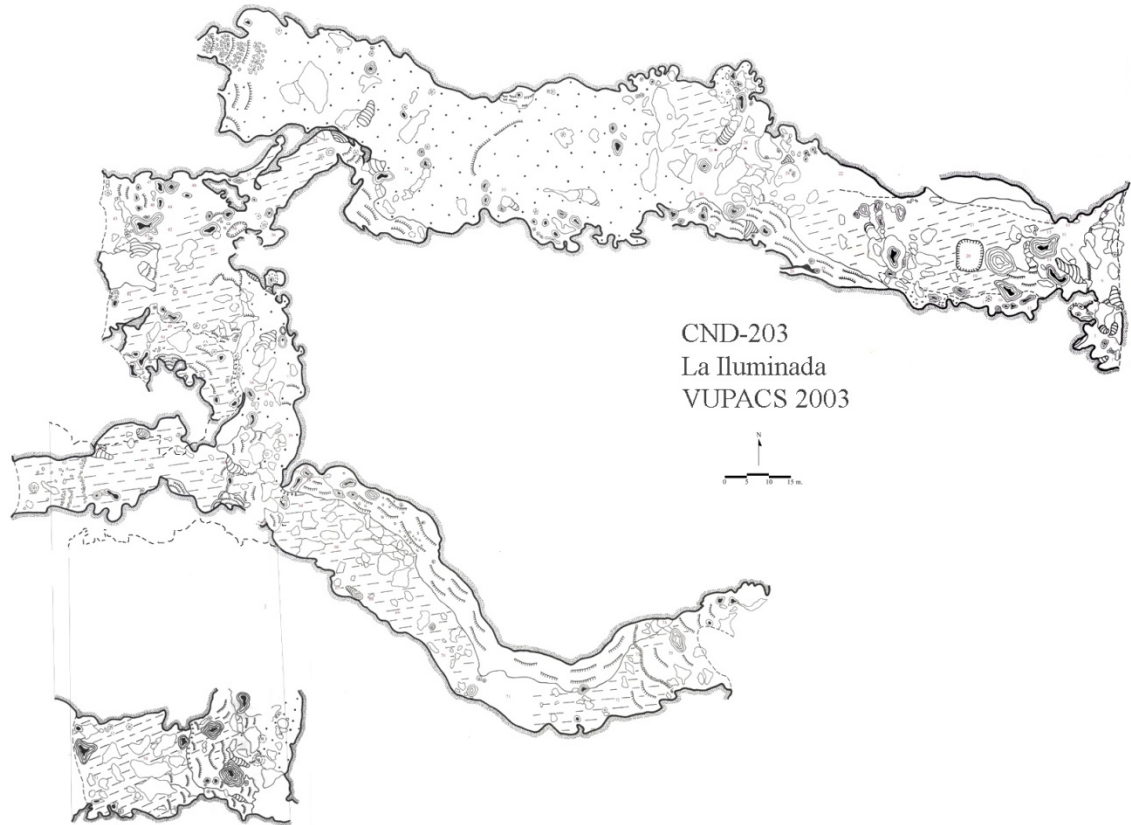
**CND-202A-21:** Dos Arroyos Orange Polychrome and other fine sherds.

### ***CND-203 La Iluminada***

Located between CND-201 and CND-202 inside a large ridge, La Iluminada (figure 3-35 to 39) is a “U”-shaped cave on a typically grand scale. It contains the remains of multiple individuals in four different parts of the dark zone as well as a large quantity of sherds and obsidian blades.

La Iluminada contains two different levels, although most of the space between them has collapsed, creating one giant tunnel with 50-70 meter ceilings. The cave was

given its name by one of the guides from Mucbilha when, working late one day, we noticed that the middle section of the cave glows in the afternoon because of a series of western-facing entrances.



**Figure 3- 35: Cueva la Iluminada**

**CND-203S-1:** Pantano Impressed jar sherds and assorted other sherds, human and animal bones, and ash.

**CND-203S-2:** Assorted sherds (mostly Early Classic) and bones.

**CND-203S-3:** A small partial bowl and assorted human and animal bones.

**CND-203S-4:** Small sherds and a human rib.

**CND-203S-5:** Small sherds and several human ribs.

**CND-203S-6:** Assorted sherds, modern garbage, and an abandoned tepezcuintle wall.

**CND-203S-7:** Assorted Early Classic sherds and *jute* shells.



**Figure 3- 36: Cueva la Iluminada, part 1**

**CND-203S-8:** Scattered sherds, *jute* shells, and part of a human cranium.

- CND-203S-9:** Scattered Early Classic sherds.
- CND-203S-10:** Assorted sherds (including Pantano Impressed and several burnt unslipped sherds), chert flakes, and part of a chert projectile point.
- CND-203S-11:** Assorted Early Classic sherds.
- CND-203S-12:** Balanza Black sherds and human bone.
- CND-203S-13:** Unslipped ceramics.
- CND-203S-14:** Unslipped and Águila Red-Orange sherds.
- CND-203S-15:** Large Dos Arroyos Orange Polychrome sherds and bird bones.
- CND-203S-16:** Assorted Early Classic sherds (several burnt).
- CND-203S-17:** Unslipped jar sherds.
- CND-203S-18:** Burnt Dos Arroyos Orange Polychrome sherds and other small sherds.
- CND-203S-19:** Small sherds and chert nodules.
- CND-203S-20:** Assorted Early Classic sherds.

Interior of the cave.

- CND-203S-21:** Assorted Early Classic sherds, including Águila Red-Orange, Balanza Black, and Dos Arroyos Orange Polychrome.
- CND-203S-22:** Assorted Early Classic sherds.
- CND-203S-23:** Assorted Early Classic sherds, including Dos Arroyos Orange Polychrome, Balanza Black, Águila Red-Orange, and Quintal Unslipped. Some of the unslipped sherds are burnt.
- CND-203S-24:** A large Quintal Unslipped jar body sherd.



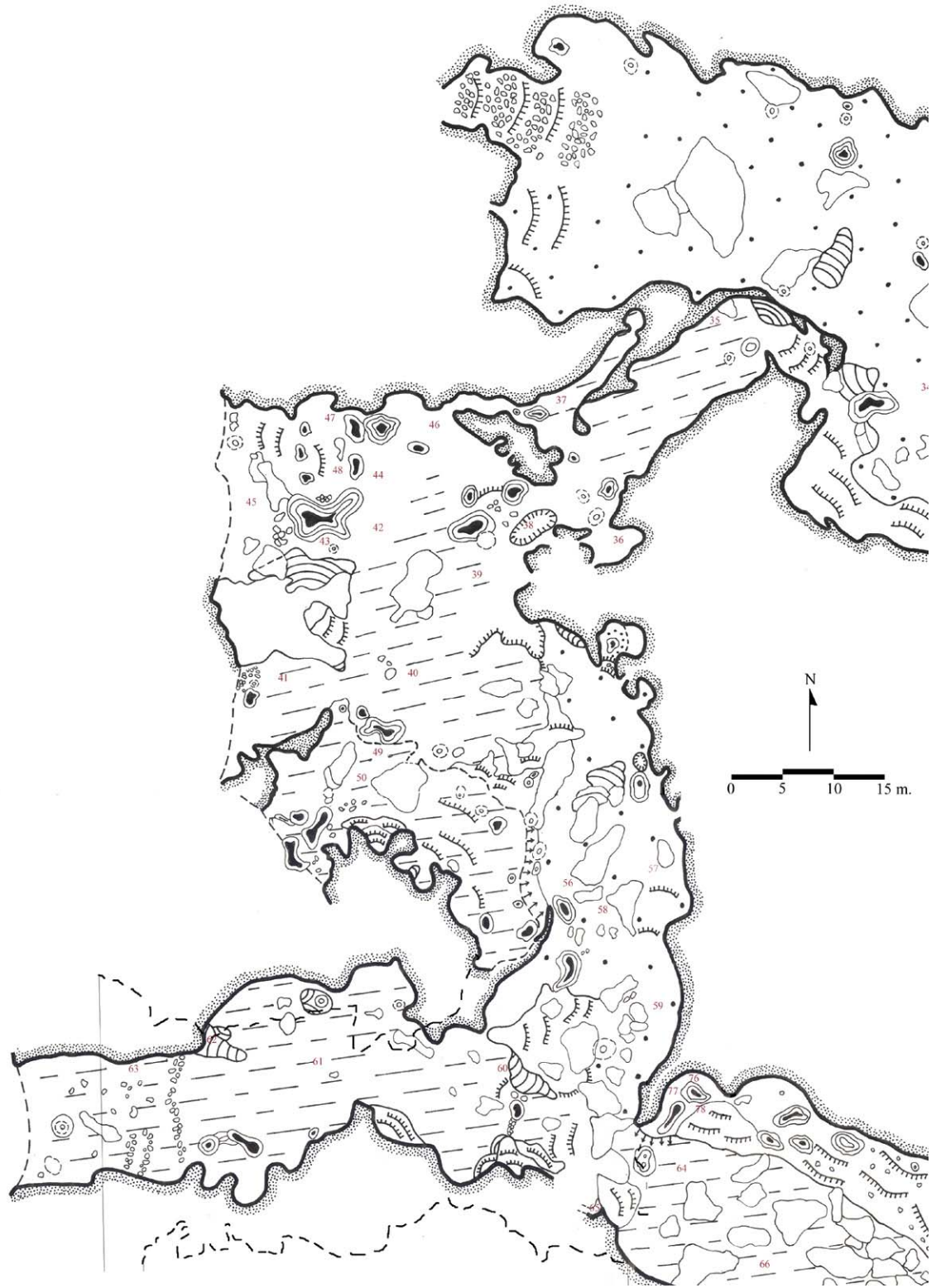
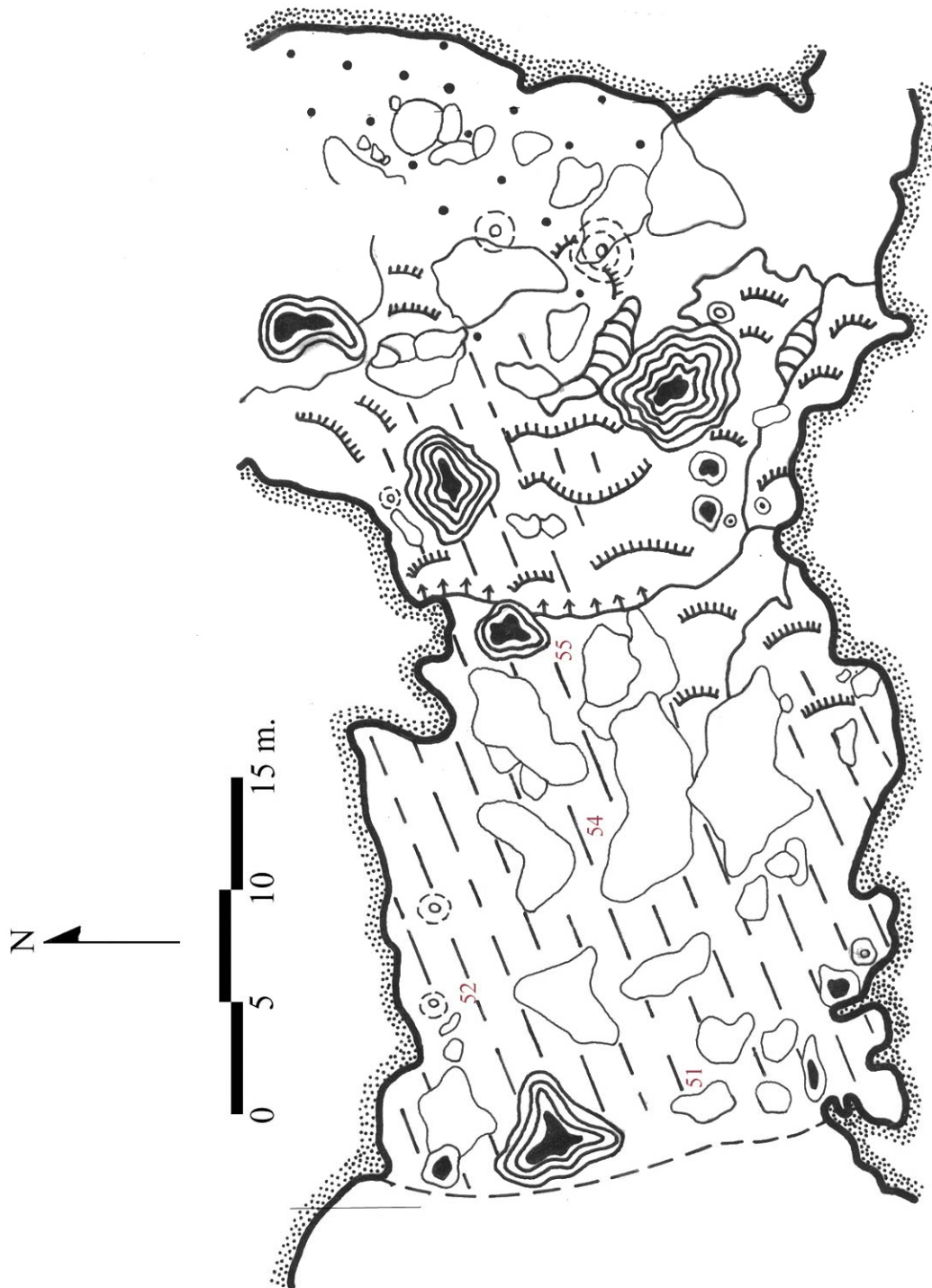


Figure 3- 37: Cueva la Iluminada, part 2

- CND-203S-25:** Four complete jar rims placed atop stalagmites. One is Águila Red-Orange and the rest are Quintal Unslipped.
- CND-203S-26:** A large Quintal Unslipped jar body sherd.
- CND-203S-27:** Águila Red-Orange jar sherds and small animal bones.
- CND-203S-28:** A long-necked jar sherd.
- CND-203S-29:** Part of a red-slipped bowl.
- CND-203S-30:** Part of a human cranium partially covered in calcium carbonate.
- CND-203S-31:** Unslipped body sherds.
- CND-203S-32:** A small juvenile skeleton with no visible cranium. A red-slipped ceramic pendant is located near its sternum. The skeleton was found in a small, wet nook near an active formation. On the floor nearby there is a large number of small, round shell beads from a necklace likely left with the skeleton.
- CND-203S-33:** A burial in a matrix of orange clay.
- CND-203S-34:** Águila Red-Orange jar sherds in an orange clay matrix.
- CND-203S-35:** Assorted Early Classic sherds, mostly Quintal Unslipped.
- CND-203S-36:** A small room with a low ceiling with parts of a Quintal Unslipped jar and modern animal bones (many with soft tissue still attached).
- CND-203S-37:** Quintal Unslipped and Pucte Brown sherds.
- CND-203S-38:** Assorted unslipped and monochrome sherds and charcoal.
- CND-203S-39:** Assorted ceramics—Pantano Impressed jar sherds, Dos Arroyos Orange Polychrome bowl sherds, and Quintal Unslipped jar sherds. In addition, there are several pieces of chert and an obsidian blade.



**Figure 3- 38: Cueva la Iluminada, interior platform**

**CND-203S-40:** Quintal Unslipped jar sherds and Dos Arroyos Orange Polychrome sherds.

- CND-203S-41:** Assorted Early Classic ceramics, some of which are burnt.
- CND-203S-42:** Unslipped jar sherds.
- CND-203S-43:** Unslipped jar sherds and a metate fragment.
- CND-203S-44:** Rimsherds from four different jars—Águila Red-Orange, Quintal Unslipped, and two Balanza Black.
- CND-203S-45:** Sherds from Águila Red-Orange jars and bowls and Quintal Unslipped jars.
- CND-203S-46:** A smashed Triunfo Striated jar.
- CND-203S-47:** Assorted Early Classic ceramics—Quixchan Washed jar sherds and Quintal Unslipped and Águila Red-Orange jars and plates, some of which are burnt.
- CND-203S-48:** Assorted ceramics, including part of a Saxche or Palmar Orange Polychrome plate.
- CND-203S-49:** Assorted ceramics, including part of a Saxche or Palmar Orange Polychrome plate.
- CND-203S-50:** Thin body sherds.
- CND-203S-51:** A red-slipped jar neck that has broken into two pieces and other sherds from the same vessel. Some of the sherds were recently excavated.
- CND-203S-52:** Polychrome plate sherds and an obsidian prismatic blade.
- CND-203S-53:** Unslipped body sherds.
- CND-203S-54:** Assorted unslipped and orange-slipped sherds, several of which are burnt.
- CND-203S-55:** Rimsherds from several jars.
- CND-203S-56:** Unslipped body sherds.

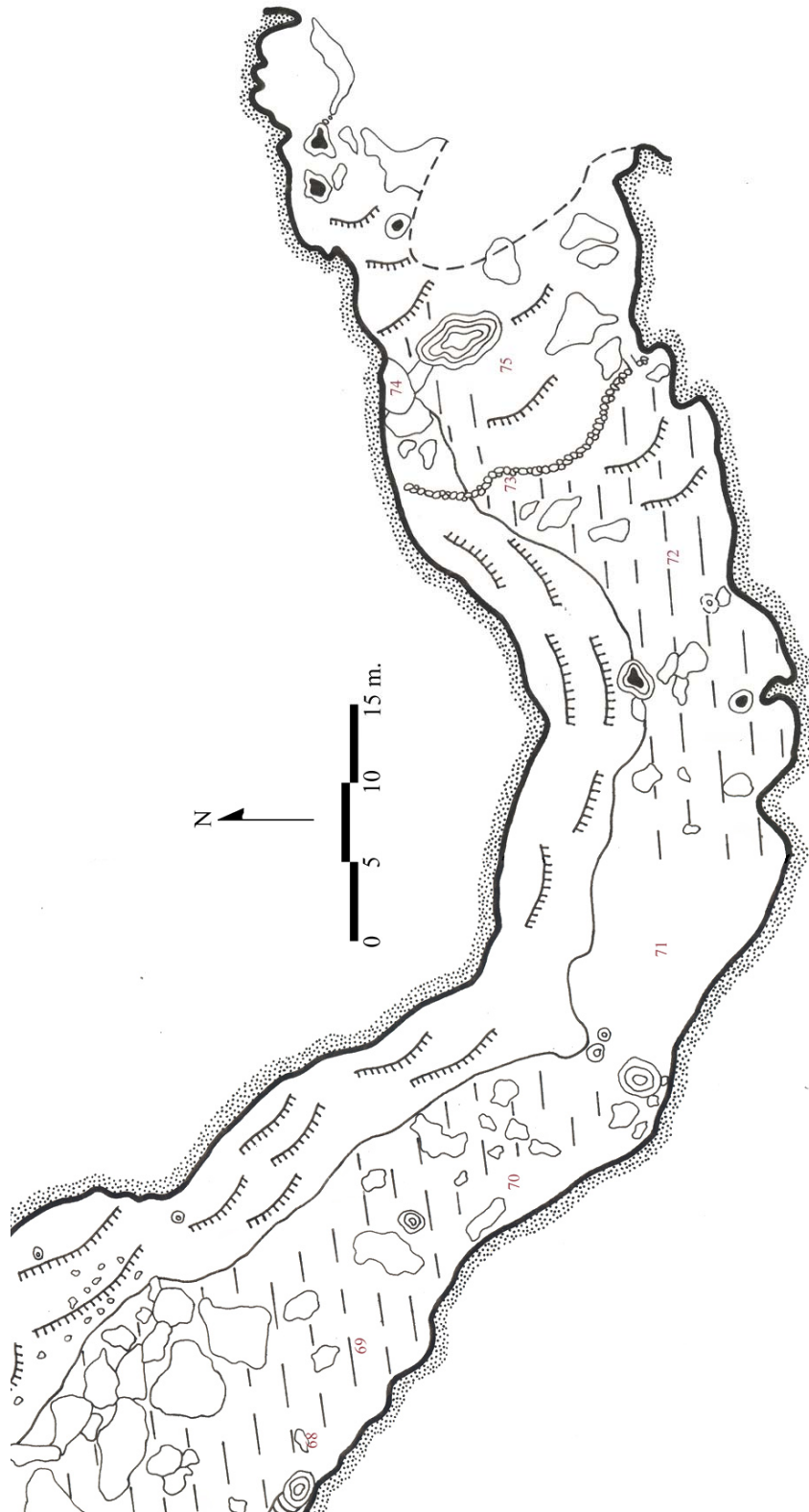


Figure 3- 39: Cueva la Iluminada, Part 3

- CND-203S-57:** Two body sherds and a part of a jar rim that have been covered in calcium carbonate and cemented to the floor.
- CND-203S-58:** Quintal Unslipped sherds.
- CND-203S-59:** The base of a jar with red paste.
- CND-203S-60:** Part of a bowl and an obsidian flake.
- CND-203S-61:** Part of an obsidian blade, unslipped body sherds, and part of an Early Classic ring base. Most of the material is covered in calcium carbonate and mixed with cave pearls.
- CND-203S-62:** Human long bones without epiphyses that were placed leaning against the cave wall.
- CND-203S-63:** Assorted ceramics—Quintal Unslipped, Dos Arroyos Orange Polychrome, Candelario Aplicado, and potentially a Subin Red rim.
- CND-203S-64:** Assorted Early Classic sherds, including an Águila Red-Orange Z-angled bowl.
- CND-203S-65:** Unslipped body sherds.
- CND-203S-66:** Unslipped and monochrome body sherds.
- CND-203S-67:** Saxche or Palmar Orange Polychrome and Quintal Unslipped sherds.
- CND-203S-68:** An Águila Red-Orange jar neck and part of a jar with a burnt exterior.
- CND-203S-69:** Dos Arroyos Orange Polychrome sherds and unslipped body sherds, some of which were burnt.
- CND-203S-70:** Unslipped jar body sherds and part of a Dos Arroyos Orange Polychrome bowl that is burnt on the exterior of the base.
- CND-203S-71:** Unslipped body sherds.

**CND-203S-72:** Unslipped body sherds and part of a jar rim.

**CND-203S-73:** A recently constructed wall and associated wooden trap for hunting tepezcuintle.

**CND-203S-74:** An unslipped body sherd.

**CND-203S-75:** An area with artifacts hidden under a layer of leaves.

**CND-203S-76:** A smashed Águila Red-Orange jar.

**CND-203S-77:** More of the jar from CND-203S-76. Most of the sherds are covered in calcium carbonate.

**CND-203S-78:** More of the jar from CND-203S-76 that has been placed atop a white stalagmite.

**CND-203S-79:** Jar sherds covered in calcium carbonate.

**CND-203S-80:** Unslipped sherds.

### ***CND-211 El Venado no. 1***

El Venado no. 1 (figure 3-40) is actually down-river from El Venado no. 2, and it is mostly a riverine cave, although there are several large ledges with a plethora of artifacts. Heading down-river, the first ledge has the densest amount of material—the entire floor is covered with a thick layer of artifacts (much like the entrance to Verónica), and above the river in a small nook formed by the cave wall and a large piece of breakdown from the ceiling there is a heavily-disturbed human skeleton.

The next major ritual area is exceedingly difficult to access—unlike the others, there is no outside access to the ledge, but instead it is necessary to climb up rubble and breakdown about 20 meters above the river, at which point it is possible to scurry up a

steeply-inclined crack just wide enough for a human body but slick with guano. Professional caver Matt Oliphant had difficulty accessing the ledge, but once he had cleared it there was evidence of heavy looting. The looters (and the ancient ritual practitioners) likely used a felled tree as a makeshift ladder.

There are several other similar ledges, but at the down-river entrance to the cave there are two labyrinths, one on each side of the river on ledges well atop them. A simple charcoal drawing of an anthropomorphic figure is found on one side, and the other has a scattering of artifacts and ends abruptly on a cliff above the river just inside the entrance to Cueva El Mico (CND-301).

While relatively straightforward, the riverine part of the cave is filled with sumps that become active during the rainy season and occasionally the ceiling drops to only a few meters above the dry season water level, so if the river was used by the ancient Maya, it is unlikely that it was during the rainy season.

### ***CND-213 El Venado no. 2***

Explorations in El Venado no. 2 have been very limited. The cave is mostly devoid of artifacts and consists of a riverine portion (at one point narrowing to less than 2 meters wide, making transit difficult) and a long tunnel at the down-river entrance. The ceiling for most of the length is about 50 cm tall, and after about 300 meters the passage narrows past the point that most humans can pass, so further explorations were not made.

Across the river from the low tunnel a small passage continues towards El Venado Seco.





***CND-218 El Pato***

Cueva el Pato (figure 3-41) is a long, winding, narrow cave that consists primarily of a single passage. Only a small scattering of artifacts were found in most of the cave, although a shoe pot with a blown-out bottom was found towards the end of the cave (the guides thought that the pot looked very duck-like, so they named the cave after it). At the end of the main tunnel, the floor drops about 10 meters, and at the very end of the cave a knapped obsidian point was found in association with a human skeleton.



**Figure 3- 41: El Pato**

### *CND-301 El Mico*

Cueva el Mico is a large cave, and part of it is used by Dreux for tourism. Much of the cave is in "twilight zone," an area with some natural illumination, and it tends to be of an even larger scale than normal. The tunnels form large rooms which can hold hundreds of people, and both these and smaller rooms placed 15-20 meters above the floor (potential ritual "stages") are naturally illuminated by the light from a series of "skylights"-large entrances that line the passages. The ease of access, the high placement of public stages, and the presence of natural light make the caves an ideal area for large-scale public ritual.

Our investigations have been limited to a small part of the cave, called "Chamber 1" (figure 3-42). This area, a smaller chamber above the tunnel floor which appears to have contained stages for public ritual, is composed of two functionally distinct sections: 1A and 1B, which are separated by a natural barrier or stalagmites formed by a spring in the ceiling. This barrier was later made more pronounced by the Maya, who filled in the empty space between each stalagmite with stones. However, the separation was intentionally not completed; both parts can be accessed by the large window to the north.

The simplest part of the chamber, 1B, is a platform looking to the north. It is naturally lit by a large skylight to the northeast, creating an ideal location for performing public rituals. Several "bleachers" or artificial terraces were built below the skylight.<sup>7</sup> While the exact function of the terraces is unknown, they do match Brady's (1989, see Chapter 4 in the present volume) criteria for public ritual, as does the ceramic evidence and the sheer scale of the cave tunnel.

---

<sup>7</sup> These are probably Precolumbian, since most of the modern constructions related to Dreux' tourist industry are found in other parts of the cave system.

CANCUEN REGIONAL ARCHAEOLOGICAL  
CAVE SURVEY

CND-1

Cueva de Candelaria  
Salidizo 1

4 Mayo 2001 J. Spenard

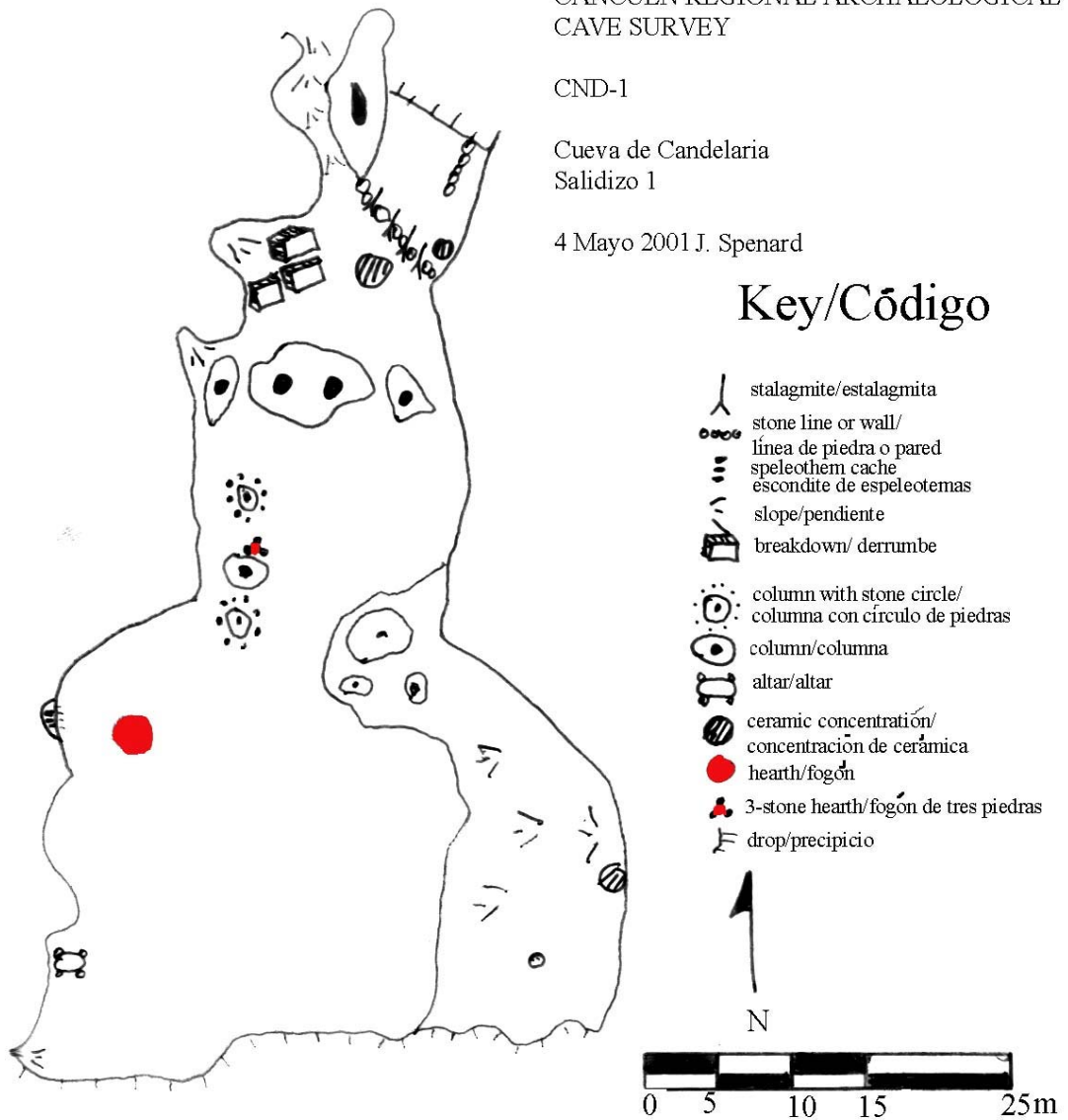


Figure 3- 42: Platform 1, El Mico

It appears that the majority of rituals in this part of the cave were performed in section 1A. Near the entrance are small piles of polychrome ceramics, 3 obsidian blades, a drilled animal canine (possibly jaguar), and a possible ceramic mirror base. In contrast to the "public" areas near the entrance visible from below, further inside the chamber are different natural and constructed features which were the focus of a different sort of ritual activity—a cache of 3 white speleothems, a 3-stone hearth, an altar composed of 3 small

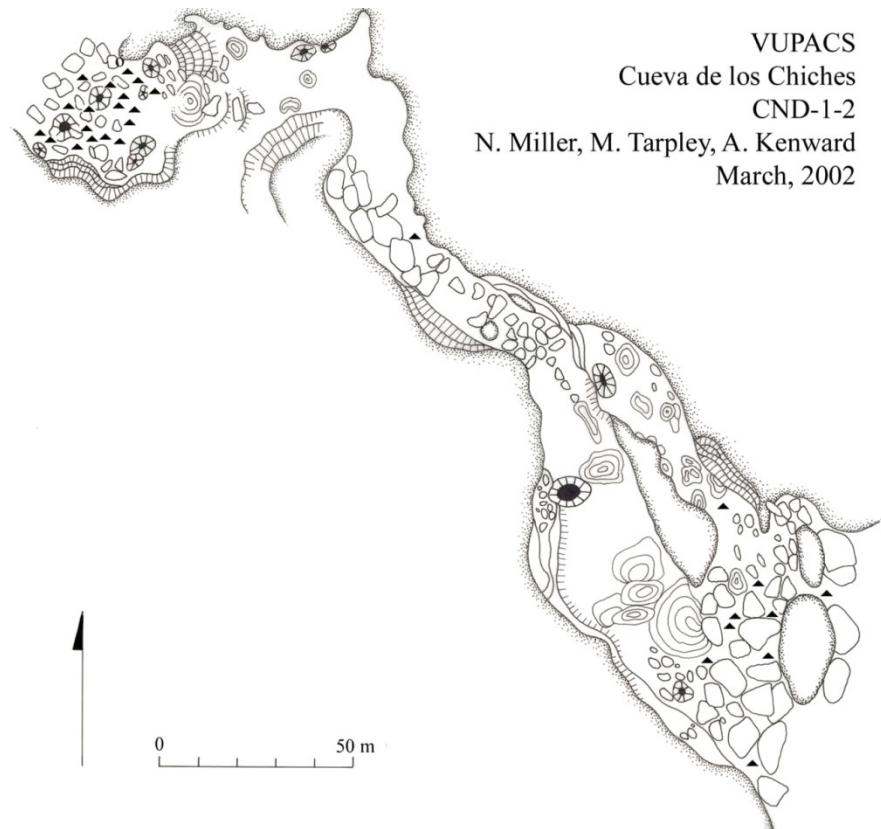
stones supporting a large tablet, and 2 stone circles around stalagmitic columns. Similar stone circles were found in Belize in Chechem Ha cave by the Western Belize Regional Cave Project, 15 minutes southeast of Melchor de Mencos (Awe *et al.* 2005: 235-7). It appears to be a variation of the cave stela complex, associated with private elite rituals at Chechem Ha and other caves in the Belize Valley (Ibid., Awe 1997, Awe *et al.* n.d.). In the case of the Candelaria Caves, this feature could have served as a place for private rituals or a private component of public ritual.

The front part of the chamber demonstrates the pattern described at Naj Tunich—the chambers below form a space large enough to house hundreds of people. The interior part of the chamber as well could contain a large group of people, but is small in comparison to the tunnels below and the access is much more naturally restricted. Unfortunately, polychrome ceramics were found in both proposed public and private space. However, upon talking to the workers at Dreux' hotel, it was discovered that ceramics (apparently polychrome) were moved from 1B to piles in the more private back part of 1A in order to protect them from tourists.

A second platform near the down-river entrance of the cave was investigated by Carot (1989) in which a pecked cross was hewn into the stone floor (Carot 1989:61-3). These symbols, common in Central and Northern Mexico, are rare in the Maya World, being mostly limited to Uaxactun and other sites in the Central Petén. Aveni *et al.* (1978, Aveni 1985) have catalogued other instances of pecked crosses throughout Mesoamerica and noted that they are often found on the floors of sacred buildings or on high peaks with a clear view of distant horizons. They attribute three different potential functions to the crosses—reference points, calendars, or gaming boards. An exact orientation of the

pecked cross is pending, but it is close enough to the entrance to be hit by direct sunlight for part of the day, which might lend credence to a calendric function.

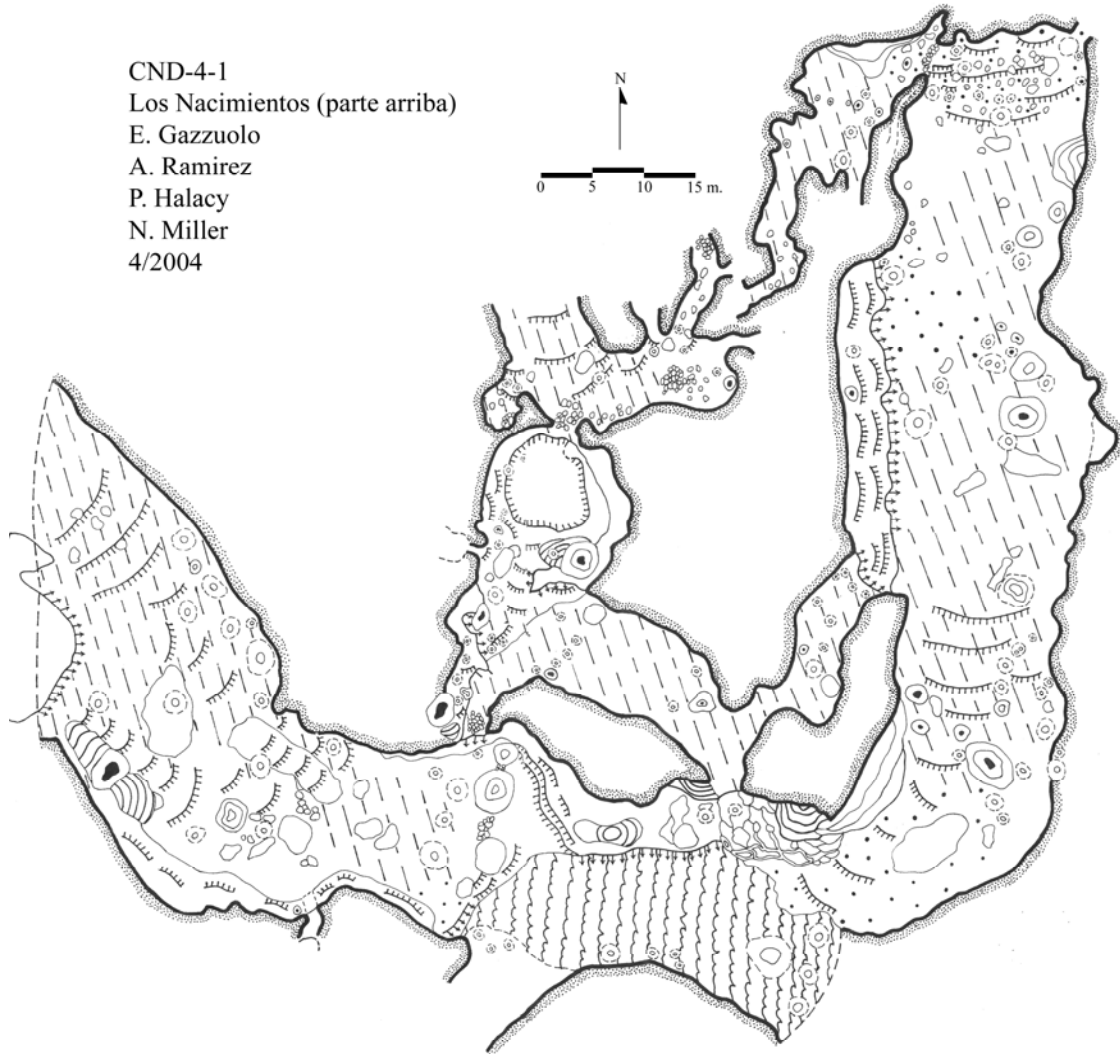
***CND-302 Los Chiches***



**Figure 3- 43: Los Chiches**

This is a large, imposing cave (figure 3-43) within sight of the highway between Raxruha and Chisec. The entrance is enormous and covered with the same mix of Early Classic sherds, obsidian blades, and bones found throughout the system. While it too has a large ledge inside of the cave almost identical to the one in Mico, it is completely devoid of artifacts. Unlike the Mico ledge, however, the ledge in Chiches is found inside the dark, suggesting that an important part of the ritual was *seeing* it be performed.

*CND-401 Los Nacimientos*



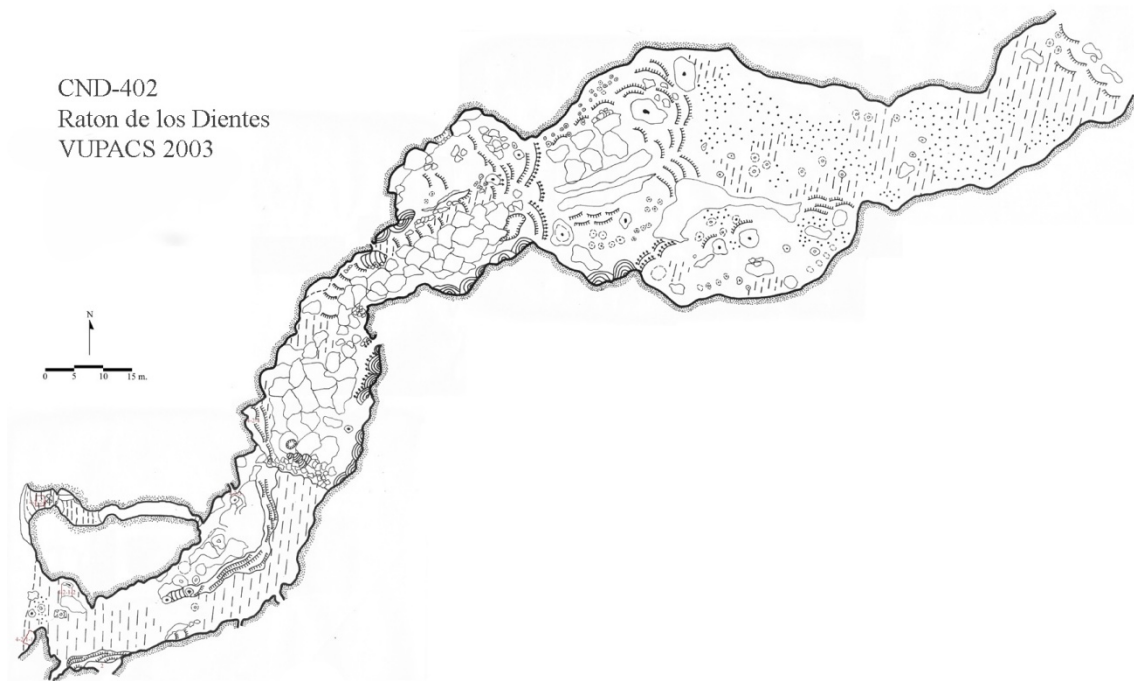
**Figure 3- 44: Los Nacimientos**

This is a large cave (figure 3-44) composed of a riverine section and a series of labyrinths and ledges atop it. The river is easily traversed during the dry season, but when the rains start the last 40 meters of the cave becomes a sump—during its lowest point during the year, the ceiling at the river exit is only about a meter above the water

level, and during the rainy season the water leaves with such force that it shoots out above the surface of the pool.

The principal entrance to the cave is inclined towards the river and covered with a thick layer of ceramics, bones, and obsidian blades. From the ledge it is possible to cross a series of travertine pools and dams above the river to reach a chamber largely devoid of material remains (see figure) or a labyrinth that more or less follows the river to the up-river entrance. While artifacts are scattered throughout the high ground in the cave, the majority of the remains are concentrated in the single entrance.

#### ***CND-402 Ratón de los Dientes***

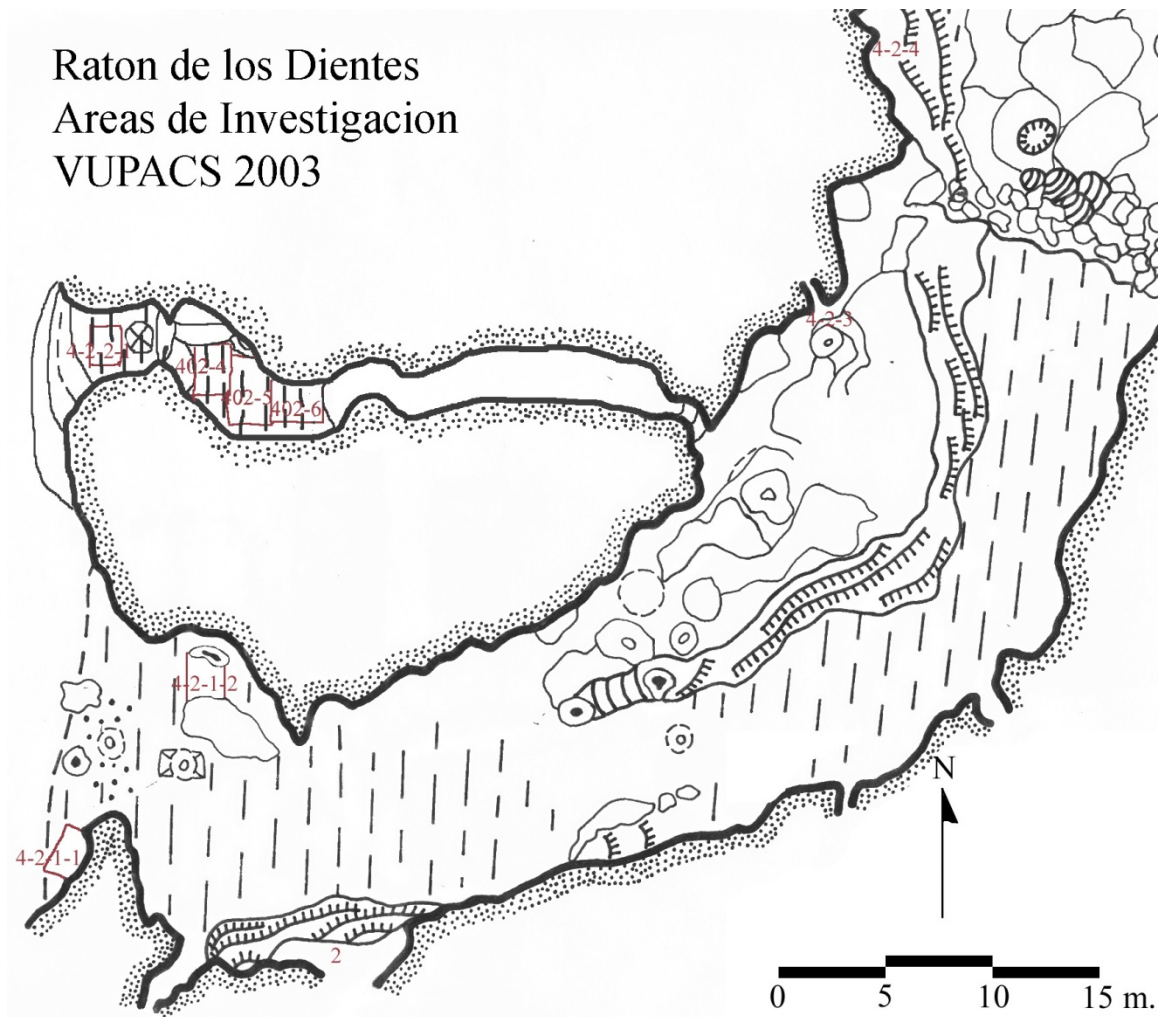


**Figure 3- 45: Ratón de los Dientes**

Ratón de los Dientes (figure 3-45 and 46) is a long tunnel that can be used to connect the village of La Lima with the Río Pasión. On the village side there are two



entrances—the large primary entrance had a deep matrix of artifacts and silt atop a layer of bivalves, snail shells, and crab claws that appears to have been intentionally deposited.



**Figure 3- 46: Ratón de los Dientes, Entrance 1 and 2**

The secondary entrance is located about eight meters above and a few meters off to the side of the lower one and consists of a ritual “stage” at the entrance and a dark interior zone just inside of it, which would have been used for the private part of any of the rituals undertaken there. In spite of the fact that the floor between the two areas was raised, in many cases sherds recovered in the “on-stage” and “back-stage” areas belonged to the same vessel.

Further into the cave, several human interments were found, one laid out in a travertine pool in a small crawlspace and the other in a small pool below a formation that had completely filled up with calcium carbonate.

Unlike the rest of the system, artifacts recovered in this cave and Metates (CND-403) were mostly Late Classic vessels in a distinctly local style. This is logical, since both of the caves are within 100 meters of La Lima.

#### *CND-402-1*

A two-by-two meter unit excavated to 60 centimeters with a mixture of Early Classic lowland and Late Classic northern highland ceramics, human teeth, two chert flakes, nine obsidian prismatic blades, three obsidian flakes, two unmodified chert stones, a chert polisher, a saltwater clam shell, and bone. At the base of the cultural level was found a thick layer of *jute* shells, crab claws, and bivalves.

Three hundred and forty-eight sherds were recovered. The Early Classic material was exclusively jars (Quintal Unslipped, Águila Red-Orange, Muqb'ilha' Orange, and Triunfo Striated), while the Late Classic material corresponds to bowls (Clavel Orange-on-Cream), jars (Delgado Unslipped, Cambio Unslipped, Patepa Unslipped, Cebada Porous, Gladiola Red, and Encanto Striated), plates (Saxche or Palmar Orange Polychrome, and Sechochoc Black), and incensarios (Grama Incensario).

#### *CND-402-2*

This unit was placed in a narrow tunnel, so it was only 1.4 by two meters, but was excavated to 50 centimeters. Like CND-402-1, it had a mix of Early and Late Classic

ceramics, sixteen chert flakes, six obsidian prismatic blades, six obsidian flakes, eleven unmodified quartz stones, one greenstone bead, and bone and abundant human teeth. The base of the unit was a mixture of shells and crab claws.

A total of 437 sherds were recovered; the Early Classic material corresponded to jars (Quintal Unslipped and Águila Red-Orange) and bowls (Dos Arroyos Orange Polychrome, and Águila Red-Orange). The Late Classic material was more varied, corresponding to jars (Patepa Unslipped, Delgado Unslipped, Cambio Unslipped, Encanto Striated, Cebada Porous, and Chichicaste Brown), bowls (Gladiola Red, Clavel Orange-on-cream, Nimha Gouged-Incised, Sechochoc Black, and Chichicaste Brown), and plates (Sechochoc Black) with one incensario fragment (Grama Incensario).

#### *CND-402-3*

This unit was located next to a small looters' pit. It contained the same mix of Early Classic lowland and Late Classic northern highland ceramics, a chert point, four obsidian prismatic blades, one obsidian flake, two pieces of unmodified quartz, a piece of iron pyrite, and a bone needle. There are several *jute* shells at the base of the unit, but less than in CND-402-1 and 2. The unit was two by 1.3 meters and the maximum depth was 35 centimeters.

A total of 271 sherds were recovered. The Early Classic material was limited to jars (Quintal Unslipped, Águila Red-Orange, Muqb'ilha' Orange, Cubierta Impressed, and Dos Arroyos Orange Polychrome) while the Late Classic material is more varied, corresponding to jars (Patepa Unslipped, Delgado Unslipped, Cambio Unslipped, and

Encanto Striated), bowls (Sechochoc Black and Clavel Orange-on-Cream), and plates (Sechochoc Black). Indeterminate sherds from two comales were also found.

A variety of lithic material was found. The chert assemblage consisted of three flakes, a prismatic blade, and the proximal end of a biface. An obsidian prismatic blade was also recovered.

#### *CND-402-4, CND-402-5, and CND-402-6*

These three units were excavated in a small passage connecting Entrance 2 to the rest of the cave. They had three distinct levels—dust (0-4 centimeters), ash (4-7 centimeters), and black soil and guano with pieces of breakdown (7-40 cm), after which bedrock was hit. In spite of the stratigraphy, sherds from the same vessels were recovered in disparate lots and units, and some of the sherds mended with those recovered in CND-402-3. An unoxidized nail was found at a depth of 20 centimeters in CND-402-5, indicating that the material had been recently disturbed. In addition to the sherds, part of a figurine, several greenstone adzes, three obsidian prismatic blades, seven obsidian flakes, a saltwater clam shell, a modified conch shell, an oliveta tinkler, bone, a chert flake, two greenstone adzes, and nine greenstone beads were recovered. CND-402-6, which was located further inside the cave than the others, had the lowest density of artifacts.

A total of 1412 sherds were recovered from these pits (805 from CND-402-4, 429 from CND-402-5, and 176 from CND-402-6). The Early Classic material corresponds to jars (Quintal Unslipped, Muqb'ilha' Orange, Pucte Brown, Águila Red-Orange, Balanza Black, and Candelario Appliqué) and bowls (Balanza Black, Águila Red-Orange, and

Dos Arroyos Orange Polychrome). The Late Classic material is more varied, with jars (Gladiola Red, Patepa Unslipped, Cambio Unslipped, Pantano Impressed, and Osoquin Unslipped), bowls (Gladiola Red, Delgado Unslipped, Grama Incensario, and Q'eqibaq Applique), and plates (Zopilote Smudged), with several comal fragments (Cambio Unslipped and indeterminate).

**CND-402S-1:** A complete Cambio Unslipped rim in a niche two meters above the cave floor.

**CND-402S-3:** This was a primary interment left in a shallow travertine pool. The bones are fragmentary and many were covered in calcium carbonate and cemented to the floor. Sherds belonging to a Dos Arroyos Orange Polychrome jar and a Quintal Unslipped jar were found next to the bones, potentially dating the interment to the Early Classic.

**CND-402S-4:** This was a secondary interment left in a small, natural stone "basin" beneath an active formation. Part of a Q'eqibaq Appliqué bowl was found associated with the skeleton, potentially dating the interment to the Late Classic.

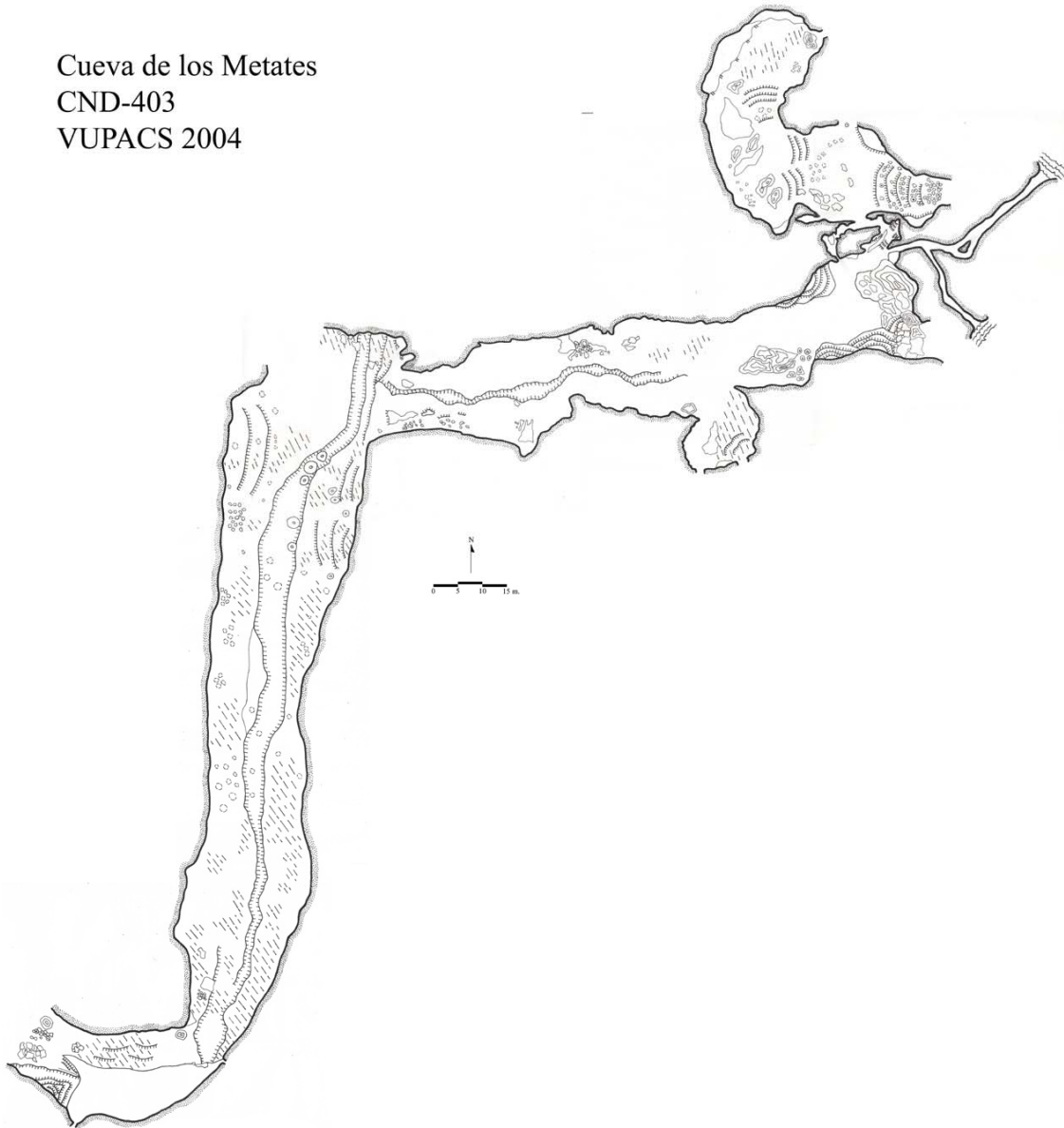
### ***CND-403 Los Metates***

Cueva de los Metates (figure 3-47 and 48) forms part of Los Nacimientos, but the connection is limited to a small opening in a wall from which it is possible to see the Río Candelaria below, so this section of the cave was given a separate nomenclature.

This section of the cave consists of a long primary tunnel that branches out into several chambers. It is found alongside La Lima and in front of Ratón de los Dientes.

The material is mostly Late Classic and local in nature, although it does have a small amount of lowland material.

Cueva de los Metates  
CND-403  
VUPACS 2004



**Figure 3- 47: Los Metates**

**CND-403S-1:** A total of 230 sherds, part of a mano, and a metate fragment were recovered in an extensive surface collection, revealing evidence of Early Classic, Late Classic, and Early Postclassic cave use. The Early Classic material is mostly limited to

jars (Águila Red-Orange, Quintal Unslipped, Quixchan Washed, and Triunfo Striated) and bowls (Águila Red-Orange, Dos Arroyos Orange Polychrome, and Actuncan Orange Polychrome), although several cylinders (Urita Gougged-Incised and Santa Teresa Incised) and a Quintal Unslipped shoe pot were also found.



**Figure 3- 48: Los Metates, Chamber 1**

The Late Classic material consists of jars (Cambio Unslipped, Pantano Impressed, and Osoquin Unslipped), bowls (Nitro Incised, Laheb' Gougged-Incised, and Chichicaste Brown), plates (Saxche or Palmar Orange Polychrome, Lem Red-on-Orange Imitation Saxche-Palmar Orange Polychrome, Zopilote Smudged, and Palmar Orange Polychrome), with several comal fragments (indeterminate and Quixchan Washed) and a

pitcher (Raxruha Cream). The Postclassic material is limited to part of a Carlota Incised bowl.

**CND-403S-2:** Five Late Classic sherds were recovered—an indeterminate bowl, a Cambio Unslipped jar, a Sechochoc Black plate, and two Patepa Unslipped jars.

**CND-403S-3:** Two sherds were recovered from an Early Classic Águila Red-Orange Z-angled bowl and a Late Classic Nimha Gouged-Incised round bowl.

**CND-403S-4:** Twenty-two sherds were recovered, all dating to the Early Classic.

Fifteen of the sherds were from Águila Red-Orange jars; the rest are from Dos Arroyos Orange Polychrome bowls (five) or jars (two) or Águila Red-Orange Z-angled bowls (two).

**CND-403S-5:** Thirty-eight sherds were recovered dating to the Classic period. The Early Classic material is split between bowls (Dos Arroyos Orange Polychrome and Águila Red-Orange) and jars (Quintal Unslipped and Águila Red-Orange), while the Late Classic material consists primarily of jars (Patepa Unslipped and indeterminate), although there is part of a Chichicaste Brown bowl.

**CND-403S-6:** Ten sherds were recovered, all belonging to the same bowl (Lanquin Unslipped ware). A chert flake was also collected.

**CND-403S-7:** Twenty-six sherds were recovered. Ten were Early Classic jar sherds (Muqb'ilha' Orange and Águila Red-Orange); the rest were indeterminate unslipped Late Classic jar sherds or Kaaleb'aal Incised bowl sherds.

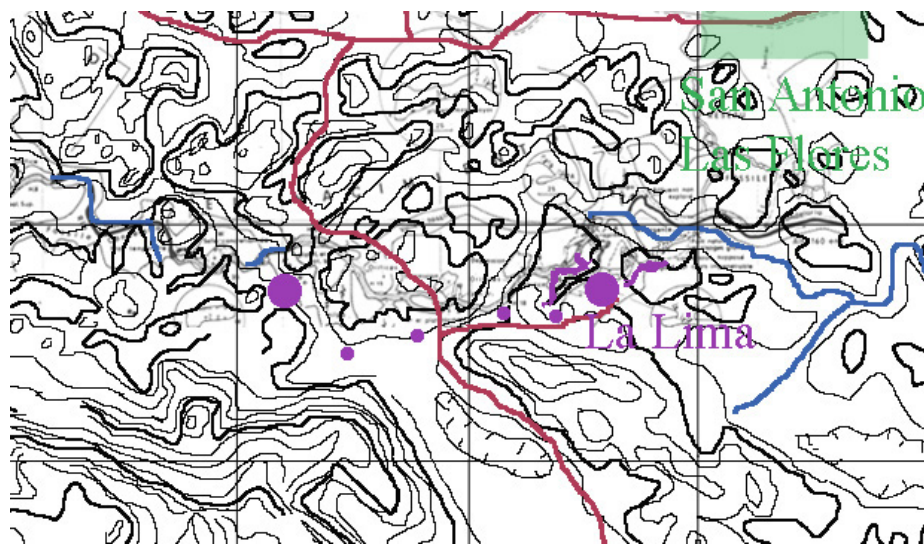
**CND-403S-8:** Seventeen sherds were recovered, dating primarily to the Early Classic—Dos Arroyos Orange Polychrome and Balanza Black bowls with one Águila Red-Orange



jar sherd. There is a small Late Classic component—Cebada Porous jars, Lem Re-on-Orange plates, and a Nimha Gouged-Incised bowl.

**CND-403S-9:** Five sherds were recovered, dating to the Early Classic (Águila Red-Orange bowls and part of a Cubierta Impressed jar), the Late Classic (a Laheb' Gouged-Incised bowl), and the Early Postclassic (a partial Unnamed Thick jar).

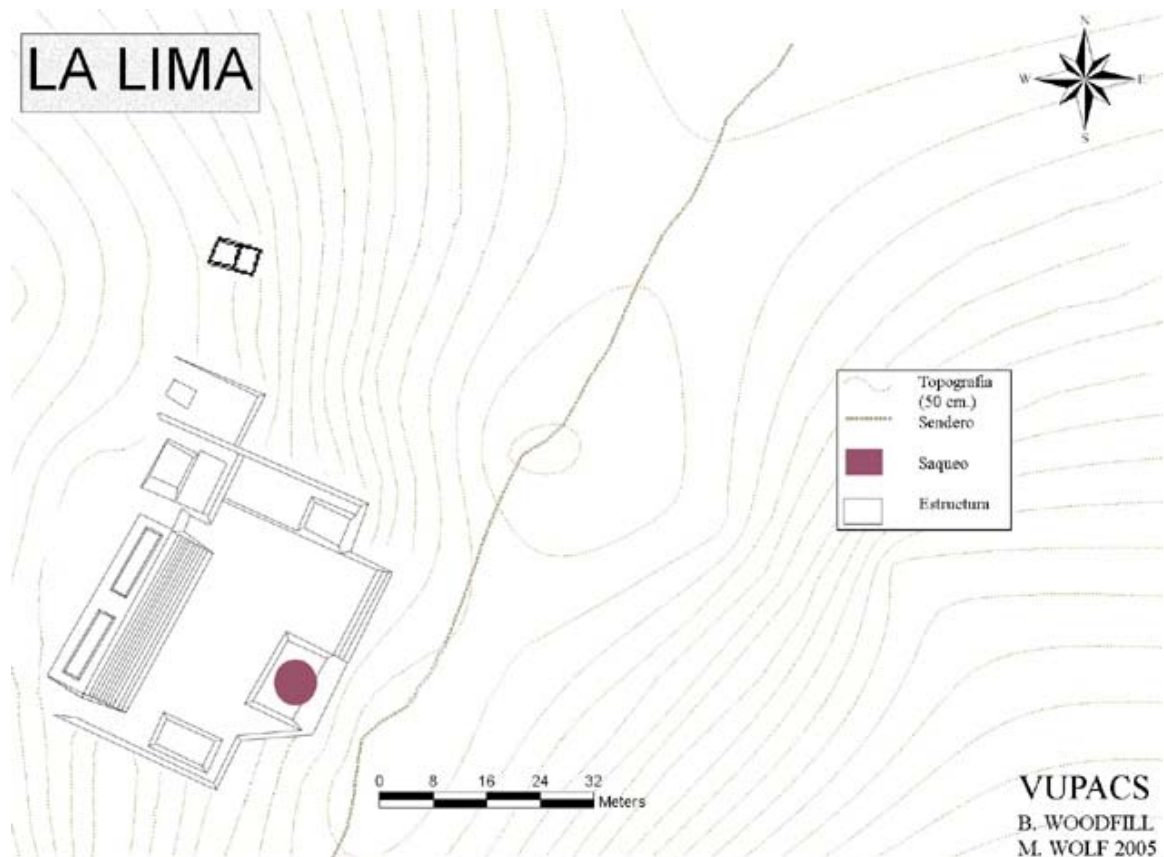
### *La Lima*



**Figure 3- 49: La Lima**

La Lima (figure 3-49) is a small, Late Classic village found on the eastern extreme of the Candelaria Caves National Park. It consists of approximately six different mound groups spread out over 1.5 kilometers following a narrow, roughly east-to-west valley, and the two principal mound groups (figure 3-50) are located at the opposite edges of the site in front of the riverine entrances to Los Nacimientos (Monterroso and Woodfill 2006a, Monterroso 2006). The site is organized in a typical northern highland manner, with larger mounds built into the valley walls (Ohnstad 2004, A. Smith 1955)

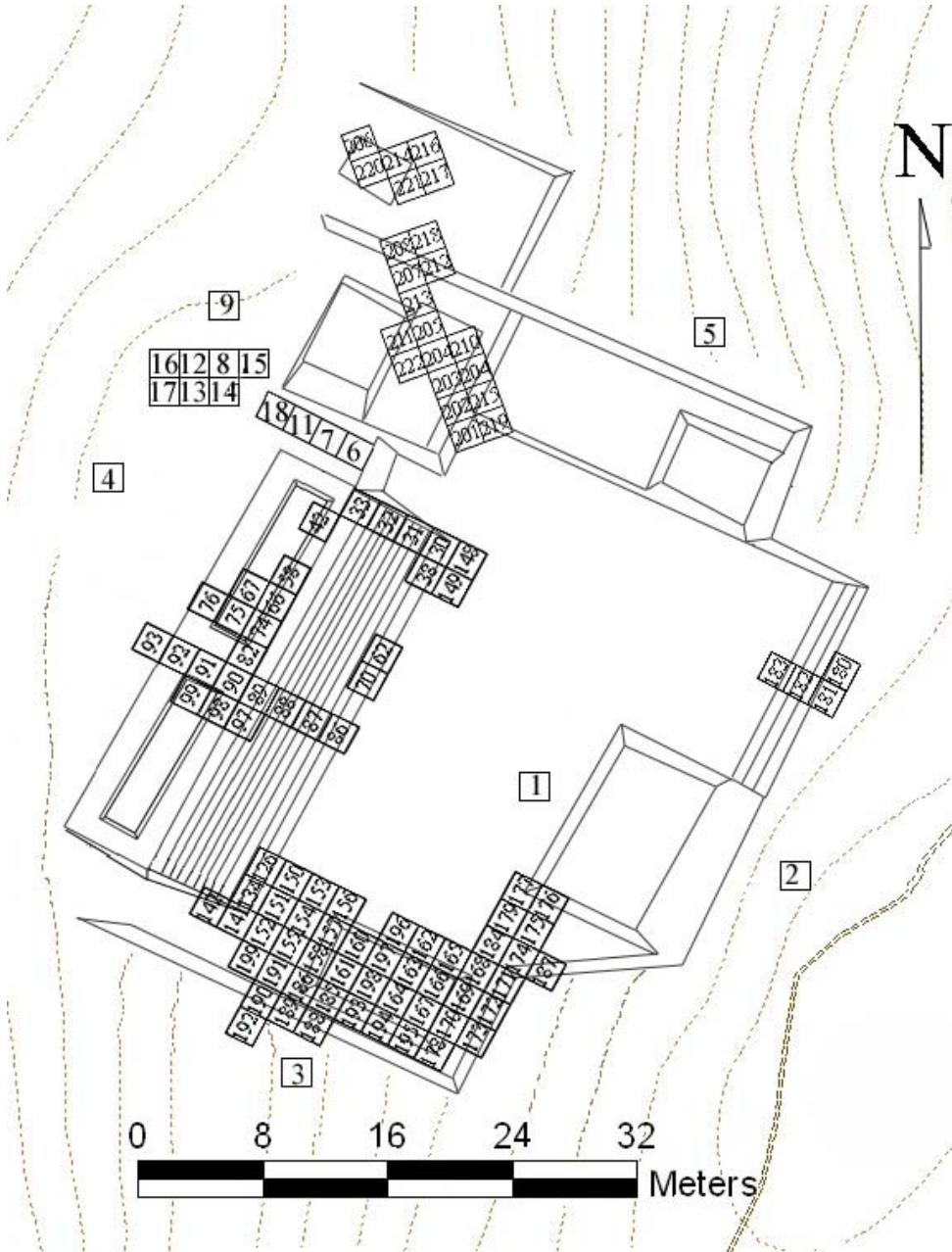
with a rubble and earth fill. Exterior stones are irregular in shape and size and roughly hewn, heavily eroded and pitted on the non-visible sides.



**Figure 3- 50: La Lima Group A**

A total of 130 units (figure 3-51) were excavated in and around Group A, the easternmost part of the site. Excavations revealed two construction episodes in each of the four buildings, both of which dated to the Late Classic. The ceramics here demonstrate a mixture of highland and lowland traits—the forms are largely lowland, as are some of the decorations, although the technology used to make them—temper and slip—are northern highland. Much of the utilitarian ware has a vegetal temper, while the service wares are almost exclusively ash and pumice, which had to be imported, although quartz and calcite are readily found in La Lima’s environs. While chert artifacts are much more common here than in the northern highlands, they also used a special

groundstone hand-axe (see appendix), other examples of which have been found throughout the northern highlands and around Coban (Woodfill et al. 2005, Monterroso 2006).

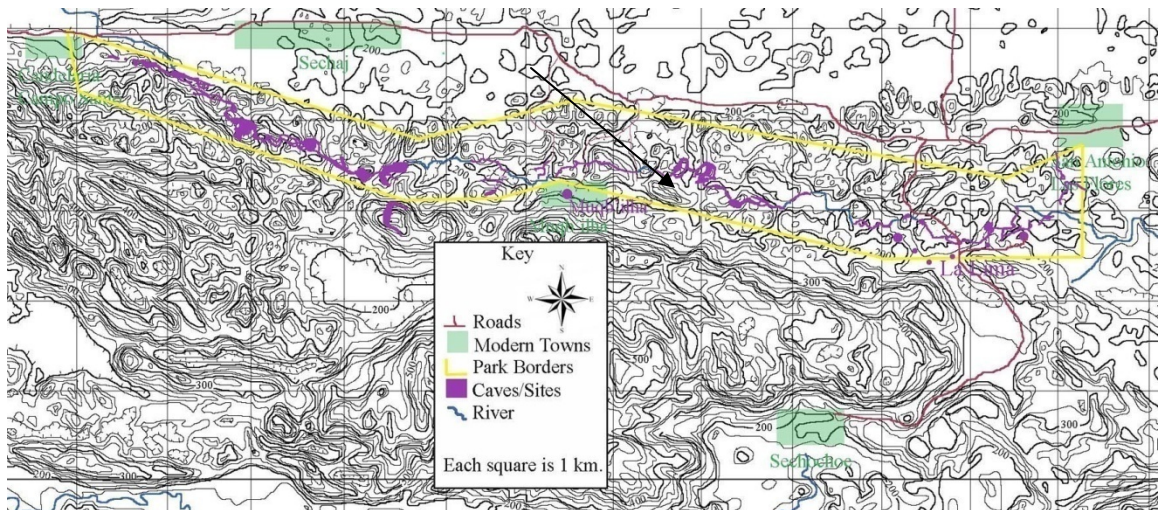


**Figure 3- 51: Excavations in La Lima**

Interestingly, not a single burial was found, in spite of the fact that most of the mounds were partially or entirely cleared. It is likely, however, that Mound A-4 is a

shrine—it is small and rectangular and found on the eastern side of the plaza. Unfortunately, a former landowner destroyed it with a backhoe while looking for treasure, leaving little apart from a hole where the mound once was. Since one of the skeletons recovered from Ratón de los Dientes was found with Late Classic, Northern highland ceramics, it is likely that they were depositing many if not all of their dead in the nearby caves.

### *Muqb'ilha' Viejo*



**Figure 3- 52: Map of the Candelaria Caves National Park with arrow pointing to Muqb'ilha' Viejo**

This is a small site underneath the modern village of Mucbilha (figure 3-52). It is located in the center of the Candelaria Cave system, on the southern bank of the Río Candelaria between El Venado no. 1 and El Venado no. 2. The settlement consists of four principal mounds organized around a large central plaza. A fifth mound, long and low-lying, extends on a north-south axis towards the northeastern corner of the plaza.



A small-scale test-pitting operation in 2006 revealed that the village was a contemporary and peer of La Lima—it is a small, northern highland community with a single, Late Classic construction episode.

#### *Summary of the Candelaria Caves National Park Data*

The Candelaria Caves were one of the principal shrines in the Early Classic, not only for the region but within the entire Maya world. A large number of ceramic vessels were shattered, dozens of human remains were left, and hundreds of thousands of obsidian blades were used and discarded. All of the evidence to date suggests that most of the ritual activities in these caves occurred within the timespan of a century (AD 460-550). The material during this time period is mostly “exotic”—it is more closely related to the central Petén than the areas further north, even though it is farther away.

At the beginning of the Late Classic, however, major changes occurred. Cave use greatly diminished at the same time that the local settlements were founded, and all of the surface material and most of the cave ceramics were of a northern highland-based, local tradition. The area of cave use was also greatly reduced—while every cave to date has Early Classic material, only the caves closest to La Lima (CND-401, 402, and 403) have any significant quantities of ceramics, although there is one partial Late Classic, northern highland vessel recovered from Ventana de Seguridad (CND-103).

#### **IV. The San Francisco Hills**

The San Francisco Hills are a 32-square-kilometer area of haystack karst hills and ridges riddled with caves, between which are hundreds of small valleys. The hills are

visible throughout most of the Upper Pasión (figure 3-53) and stand in stark contrast to the largely flat terrain. The area is devoid of surface water, although the Río Pasión is several kilometers to the west and the Río Machaquila is directly north. The caves here are small, dry, and filled with bats, and are normally only found near the tops of the hills.



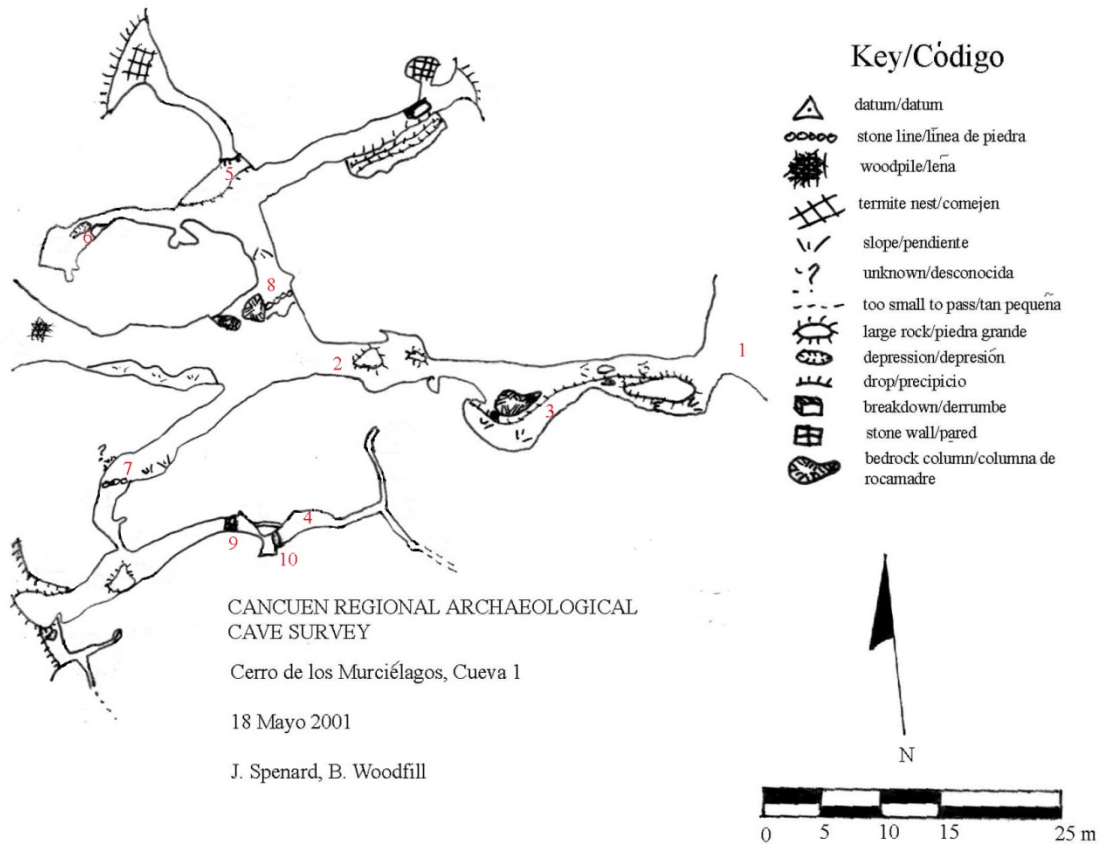
**Figure 3- 53: View of the San Francisco Hills from Cancun (photo by Jon Spenard)**

The caves typically have a much more modest quantity of material remains than Hun Nal Ye and Candelaria, but they make up for this with the time depth—the archaeological record here spans 2,000 years of history, from the initial Lowland development of ceramics to the Classic collapse.

### *Registered Caves in the San Francisco Hills*

Fifteen caves around the central part of the region were reconnoitered by VUPACS in 2001 and 2002, and of these, 11 caves were mapped and surface-collected. One excavation unit was dug in a small rock shelter (CBA-1-14). Further investigations were undertaken by Jon Spenard in 2004 (Spenard 2006) in the eastern part of the system, the results of which are summarized towards the end of this section.

### ***CBA-1-1, Cueva de los Murciélagos***



**Figure 3- 54: Los Murciélagos**

This is a small, multiple-entrance cave (figure 3-54) first identified and mapped in the 2001 field season. Much of the ritual appears to have dated to the Terminal

Preclassic, and among the finds were a cache of 2 whole mushroom pots and a large fragment of a shoe pot. It conforms exactly to the ideal *witz*—a large pyramidal hill with six different cave entrances near the peak dramatically visible from the valley below. Three different dark zones are present in the cave, all of which have evidence of specialized use including the mushroom pot cache and a (much disturbed) burial that was associated with the femur of a sea turtle (Thornton, pers. comm. 2006).

**CBA-1-1-1:** Assorted ceramics. Ten sherds were recovered in a brief surface collection, dating to the Late Preclassic (Sierra Red plates and bowls), the Terminal Preclassic (A Kape Punctated shoe pot), the Early Classic (an Águila Red-Orange bowl and a Balanza Black jar), and the Late Classic (a Tinaja Red jar). Forty-one chert artifacts were found—39 flakes, a prismatic blade, and the proximal end of a biface.

**CBA-1-1-2:** Assorted ceramics. Six sherds were recovered, all of which were from Early Classic jars (Quintal Unslipped, Quixchan Washed, Balanza Black, and Águila Red-Orange).

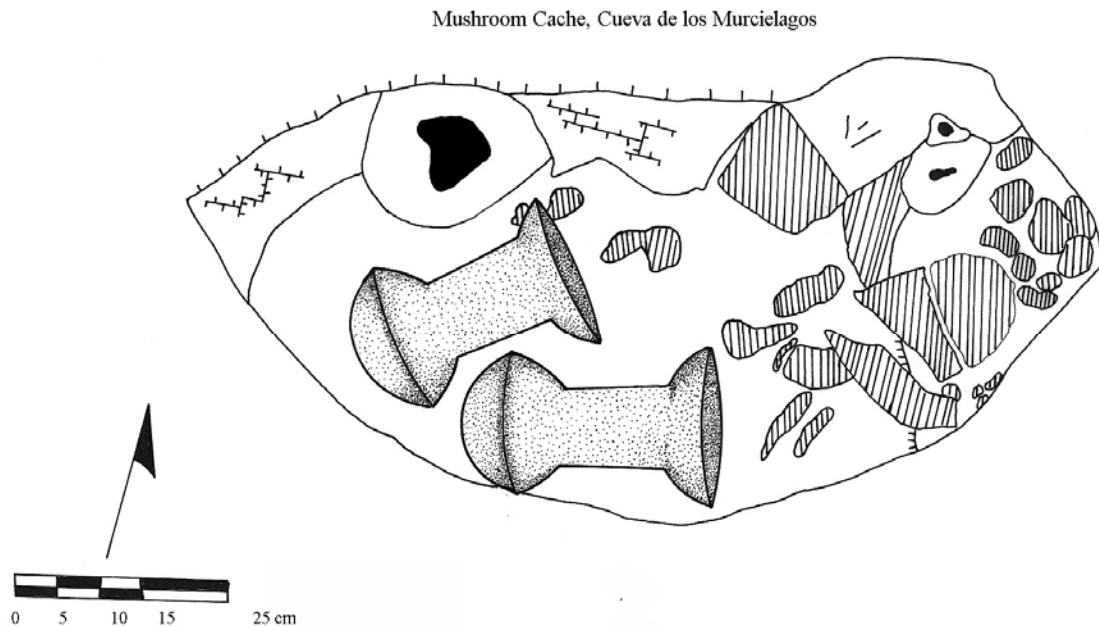
**CBA-1-1-3:** A disturbed burial with associated Early Classic ceramics (Águila Red-Orange jar sherds and Balanza Black bowl sherds) and a marine turtle leg bone. Several hearths are also present.

**CBA-1-1-4:** Assorted ceramics are present, including an Águila Red-Orange bowl rim and Quintal Unslipped jar sherds. This part of the cave is completely dark.

**CBA-1-1-5:** Assorted ceramics. Ten sherds were surface collected, all of which dated to the Early Classic. With the exception of a Balanza Black bowl base, all of the sherds belonged to unslipped jars (Quintal Unslipped, Triunfo Striated, and Quixchan Washed).



**CBA-1-1-6:** Dark zone. Two mushroom pots (figure 3-55) were placed in a nook three meters above the cave floor.



**Figure 3- 55: Mushroom Cache, Los Murciélagos**

**CBA-1-1-7:** Line of stones.

**CBA-1-1-8:** Line of stones.

**CBA-1-1-9:** Wall made of breakdown of unknown date.

**CBA-1-1-10:** Wall made of breakdown of unknown date.

### ***CBA-1-2, Cueva de los Chuchos***

This cave is a small walk-through filled with walls which initially caused much excitement among the mappers until it was revealed by our guide that they were all tepezcuintle-hunting devices built in recent years. Assorted ceramics and potentially human bones were identified. Eleven sherds were obtained in a brief surface collection. Most dated to the Early Classic (Águila Red-Orange and Muqb'ilha' Orange jars and

Águila Red-Orange and Dos Arroyos Orange Polychrome bowls), although part of a Late Preclassic Sierra Red bowl and a Late Classic La Isla Orange jar were also recovered.

*CBA-1-3, Queso Suizo*

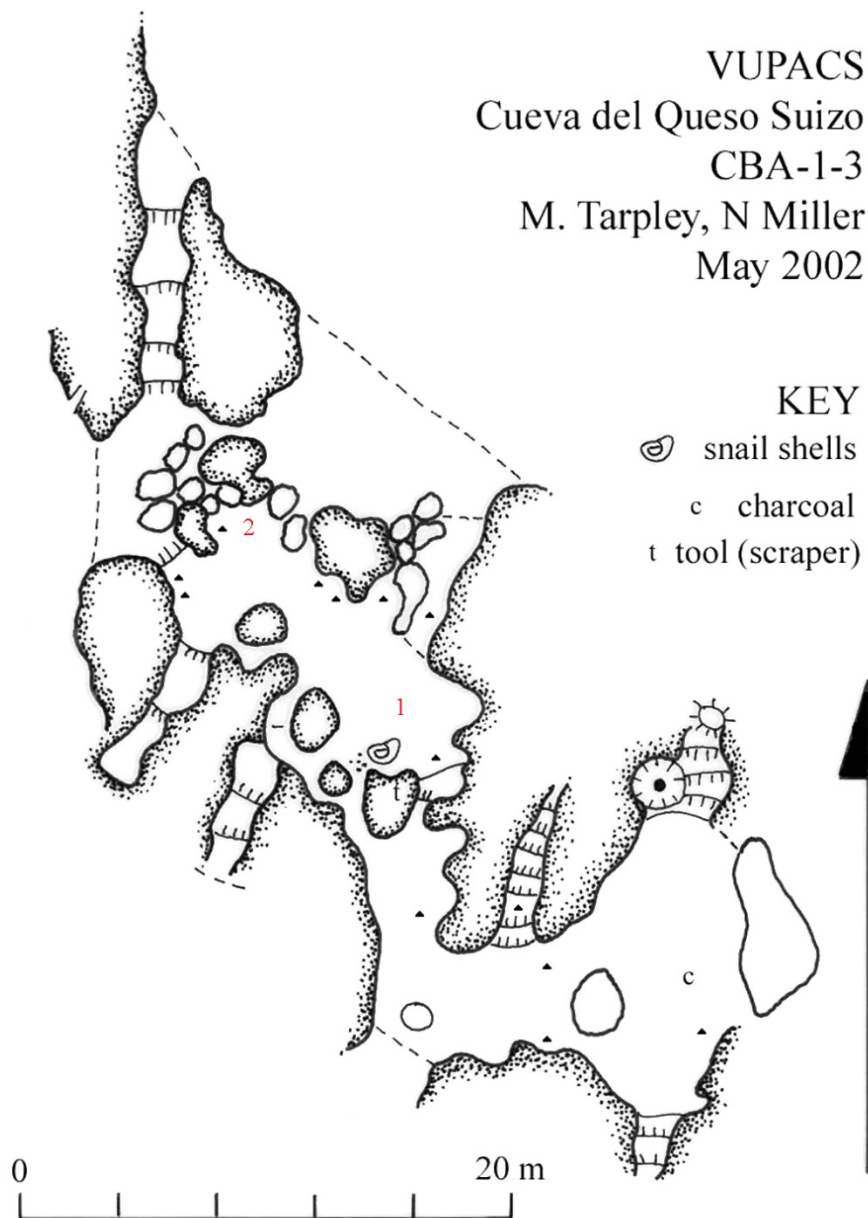


Figure 3- 56: Queso Suizo

This is a small, multi-entrance (figure 3-56) cave atop a large hill similar to, but much smaller than, Murciélagos. It contains a small labyrinth, in front of which is a cache of large snail shells. Most of the cave floor (CBA-1-3-1) is littered with polychrome and service-ware sherds.

**CBA-1-3-1:** Assorted ceramics, a chert flake, and a chert core. Four sherds were recovered in a brief surface collection, dating to the Late Preclassic (a Sierra Red plate), the Early Classic (a Dos Arroyos Orange Polychrome bowl) and the Late Classic (Tinaja Red and Chatillas Smoothed bowls).

**CBA-1-3-2:** Ceramics and shells were recovered from the backdirt of a looters' pit. Three sherds were recovered, each dating to the Early Classic—an Águila Red-Orange bowl and jar and a Triunfo Striated jar.

#### ***CBA-1-4, Cueva de las Manos***

Cueva de las Manos (figure 3-57) is a small cave with a large entrance. Scattered ceramics and looters' pits are present throughout the entrance and interior of the cave (CBA-1-4-3). To the side of the entrance, Nicolas Miller identified a cache consisting of chert flakes topped by half of a mano (CBA-1-4-1), and another half-mano was discovered at the entrance to the cave (CBA-1-4-3). Parts of a human skeleton were discovered at the back of the cave, mixed with collapse from the ceiling (CBA-1-4-2).

**CBA-1-4-1:** Fifty-nine chert flakes were recovered in a single lens underneath a broken mano. Nineteen sherds were mixed with the material; with the exception of a Sierra Red sherd of indeterminate form all of the material dates to the Early Classic—Águila Red-Orange and Quintal Unslipped jars and Águila Red-Orange bowls.

VUPACS  
Cueva de las Manos  
M. Tarpley, N. Miller  
May, 2002



Figure 3- 57: Las Manos

**CBA-1-4-2:** A fragmentary human skeleton, probably male (Pope, pers. comm. 2002), was recovered in the dark zone of the cave at the base of a pile of rubble. The bones were wedged between pieces of rock. A snail (likely modern) was also recovered.

**CBA-1-4-3:** Assorted sherds, four chert flakes, two chert cores, shell, and a mano fragment were recovered from this lot, which was located in the twilight zone of the cave. A series of looters' pits have been dug throughout the area. Fifty-two sherds were recovered that indicate at least 1,500 years of activity in this cave. The Middle Preclassic material consists of jars (Guitarra Incised and Boolay Brown) and bowls (Xexcay Fluted and Juventud Red) as does the Late Preclassic material (Sierra Red jars and bowls, Laguna Verde Incised bowls, and Polvero Black jars). The Early Classic material is mostly jars (Quintal Unslipped and Águila Red-Orange jars and Balanza Black and Águila Red-Orange bowls), and the late Classic material consists of jars (Cambio Unslipped) and plates (Palmar Orange Polychrome).

**CBA-1-4-4:** A smashed Late Preclassic plate (Acordión Incised) was found underneath the dripline at the mouth of the cave.

### ***CBA-1-7, Cueva del Coche***

This cave (figure 3-58) is found in a large hill and consists of a small labyrinth with three entrances—two on the eastern side and one on the south, and the majority of sherds are found close to the eastern entrances. In the middle of the cave, a pig skull was placed atop a large stalagmite.

**CBA-1-7-1:** Scattered sherds and animal bone. Nineteen sherds were recovered during a surface collection. Two sherds were Preclassic—part of a Sapote Striated jar and an

Anona Specular Red bowl; the rest were Early Classic jars (Quintal Unslipped, Triunfo Striated, Quixchan Washed, and Cubierta Impressed), although one basal-flanged bowl of indeterminate type was also recovered.

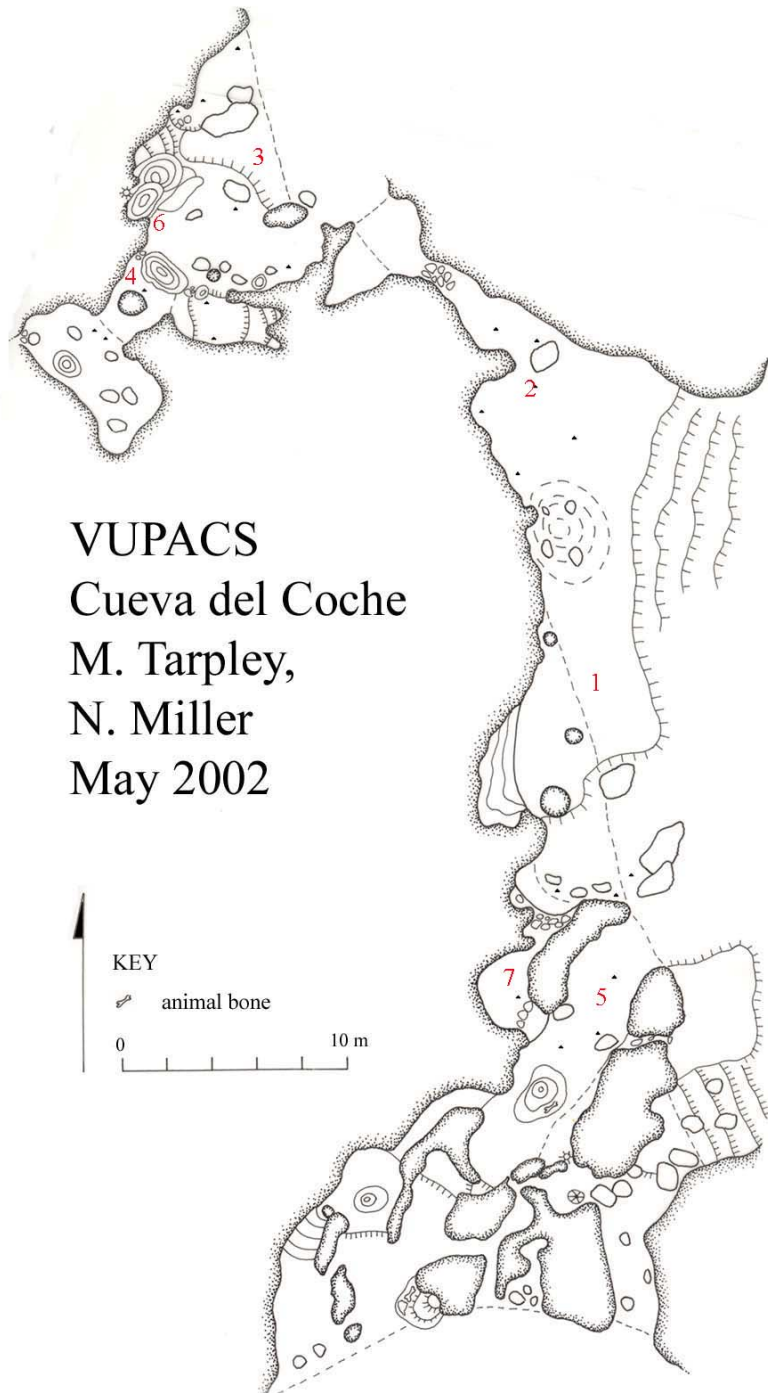


Figure 3- 58: Cueva del Coche

**CBA-1-7-2:** Scattered sherds. CBA-1-7-2 and CBA-1-7-3 as separated by a collapsed wall. Six sherds were recovered, all dating to the Early Classic—Águila Red-Orange and Triunfo Striated jar sherds and an Águila Red-Orange bowl and cup.

**CBA-1-7-3:** Scattered sherds. CBA-1-7-2 and CBA-1-7-3 as separated by a collapsed wall. Seven sherds were recovered during a brief surface collection—a Chechen Spotted-Incised cup (Middle Preclassic), Polvero Black plate sherds (Late Preclassic), and various Early Classic jars (Muqb'ilha' Orange, Dos Hermanos Red, and Triunfo Striated) and a single Early Classic bowl sherd (Lucha Incised).

**CBA-1-7-4:** Scattered sherds. Eleven sherds were recovered, each belonging to an Early Classic jar (Quintal Unslipped and Águila Red-Orange).

**CBA-1-7-5:** Scattered sherds in the twilight zone of the cave. One Águila Orange rimsherd from a bowl was recovered.

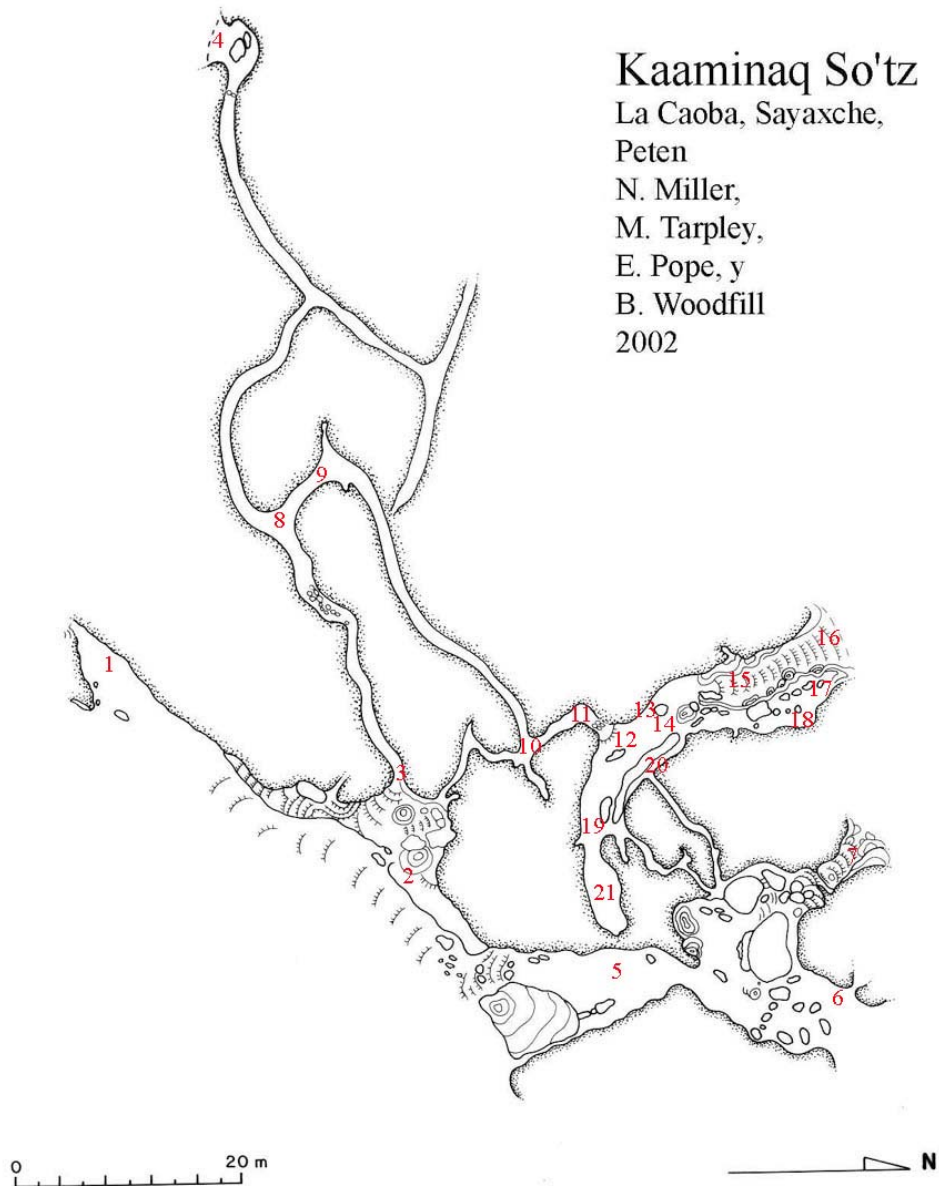
**CBA-1-7-6:** Scattered sherds. Two Cambio Unslipped jar sherds were recovered.

**CBA-1-7-7:** This lot is found in a crawlspace elevated approximately 2 meters above the surrounding floor. It appears to have been sealed off from the rest of the cave through the construction of a wall on either end. One Triunfo Striated jar sherd was recovered.

### ***CBA-1-8, Kaaminaq So'tz***

This cave (figure 3-59) is in two main parts—a large labyrinth which has been blocked off at each of its entrances by ancient walls and a large "sherd room" located at an entrance inaccessible from the outside—a dramatic crack approximately 15 meters above the valley floor. Unlike most of the caves investigated this season, this cave was not in a hill, but rather a large ridge which forms a long wall separating two valleys. A

trail through the labyrinth is sporadically marked by sherds, and the walls are filled with "stars," identified by the modern Q'eqchi' inhabitants as paintings. They are, however, actually star-shaped cross-sections of coral fossils which have eroded with their rock matrix. The sherd room itself has evidence of potentially hundreds of Early Classic smashed vessels (Bill et al. 2003, Woodfill 2003), several obsidian blades gathered for residue analysis, and a shell gorget carved into the likeness of a skull.



**Figure 3- 59: Kaaminaq So'tz**



It appears that the cave was used much like structures described in Oxkintok, Yaxuna, and the Usumacinta region-labyrinths into which shaman-kings entered, maneuvered, and exited above the crowd to perform public ritual (Suhler et al. 1998). The quantity of presentation-ware ceramics near the entrance certainly indicates the potential for such activity, and the obsidian blades, which are often found in parts of caves associated with ritual bloodletting, would lend credence to this hypothesis. Due to the presence of the walls throughout the labyrinth and the termination of use of the sherd room in the Early Classic, it would appear that the walls would have been erected around the labyrinth at this point in time. Some evidence of ritual continues until the Late Classic in the cave, but only in more accessible entrances in front of the labyrinth.

**CBA-1-8-1:** A low area with accumulated sherds and chert cores outside of the cave but under the dripline. Eight sherds were recovered dating to the Middle Preclassic (a Juventud Red tecomate), the Early Classic (an Águila Red-Orange jar and Z-angled bowl, two Triunfo Striated jar sherds, and a Dos Arroyos Group cylinder), and the Late Classic (sherds from a Cambio Unslipped jar and a Chaquiste Impressed bowl). Two chert flakes and a chert core were also collected.

**CBA-1-8-2:** A low shelf below the principal entrance to the cave where ceramics have accumulated. A single sherd was recovered from a Dos Arroyos Orange Polychrome basal-flanged bowl.

**CBA-1-8-3:** A well-constructed wall made out of breakdown that closed access to the labyrinth and the Sherd Room. Part of an Early Classic, Quintal Unslipped comal was recovered.

**CBA-1-8-4:** Assorted ceramics in a small entrance with a low (under 1.5 meter) ceiling.

**CBA-1-8-5:** Assorted sherds, five chert flakes, and a chert core. Fifteen sherds were recovered in surface collection dating to the Middle Preclassic (a Guitarra Incised bowl, a Juventud Red plate, and a Paso Danta Incised plate), the Late Preclassic (a Boxcay Brown plate, a Laguna Verde Insied jar, and three sherds from Sierra Red plates), and the Early Classic (Pucte Group Gouged-Incised bowl, an Águila Red-Orange bowl and jar, a Dos Arroyos Orange Polychrome bowl, a Quintal Unslipped jar, and a Triunfo Striated jar).

**CBA-1-8-6:** Assorted ceramics and three chert flakes. This feature is separated from the rest of the cave by what appears to be a collapsed wall. One Boxcay Brown bowl sherd was recovered.

**CBA-1-8-7:** Assorted ceramics. This feature is located in a minor entrance to the cave characterized by a narrow crawlspace between the ceiling and the cave floor, which consists mostly of breakdown. Three sherds were recovered, one indeterminate Early Classic sherd and two sherds from Quintal Unslipped jars.

The following features (CBA-1-8-8 to 11) are found in the cave's dark labyrinth. Each of them is found along the same path connecting the cave entrance to the Sherd Room.

**CBA-1-8-8:** Quintal Unslipped body sherds.

**CBA-1-8-9:** Águila Red-Orange jar and Dos Arroyos Orange Polychrome bowl sherds.

**CBA-1-8-10:** Dos Arroyos Orange Polychrome bowl and Cambio Unslipped jar forms.

This part of the cave has a low ceiling (approximately 1 meter tall).

**CBA-1-8-11:** A small wall sealing the crawlspace that leads to the Sherd Room. One Quintal Unslipped jar sherd was recovered along with a chert core

The rest of the features in the cave (CBA-1-8-12 to 21) are found in the Sherd Room.

**CBA-1-8-12:** Twenty-two sherds were recovered, all of which dated to the Early Classic. The material consisted of jars (Quintal Unslipped, Triunfo Striated, Silvano Incised, and Águila Red-Orange) and bowls (Dos Arroyos Orange Polychrome and Águila Red-Orange). Part of a chert eccentric was also recovered.

**CBA-1-8-13:** Eight Early Classic sherds were recovered; the material consists of jars (Quintal Unslipped and Águila Red-Orange) and bowls (Águila Red-Orange).

**CBA-1-8-14:** Forty-six sherds were recovered; with the exception of two Late Preclassic sherds (an Achiotes Unslipped jar and a Polvero Black plate), all of the material dates to the Early Classic. The sherds belonged primarily to jars (Triunfo Striated, Quintal Unslipped, Águila Red-Orange, and Muqb'ilha' Orange), although there are several bowls present (Dos Arroyos Orange Polychrome and Águila Red-Orange). Four chert artifacts were recovered: two flakes, a core, and a scraper.

**CBA-1-8-15:** No material was recovered.

**CBA-1-8-16:** This part of the room is located in front of the Sherd Room at the edge of the cliff. Thirty-seven sherds were recovered, all dating to the Early Classic. The majority of the material came from jars (Triunfo Striated, Quintal Unslipped, and Águila Red-Orange); two Águila Red-Orange bowls and an indeterminate cup were recovered as

well. Six chert flakes, two chert cores, and three obsidian prismatic blades were also recovered.

**CBA-1-8-17:** This feature is found approximately four meters above CBA-1-8-16.

Thirty-three sherds were recovered; with the exception of part of a Desvario Champfered plate (from the Middle Preclassic), all of the sherds date to the Early Classic. Most of the material is from jars (Triunfo Striated, Quintal Unslipped, Cubierta Impressed, Quixchan Washed, and Silvano Incised), although several Dos Arroyos Orange Polychrome bowls were also recovered. One obsidian prismatic blade and seven chert artifacts were uncovered—four cores, two flakes, and a pecker.

**CBA-1-8-18:** A chert flake was recovered.

**CBA-1-8-19:** Fifty-two sherds and a saltwater shell gorget were recovered. With the exception of a Desvario Champfered sherd (Middle Preclassic; likely from the same vessel as the sherd in CBA-1-8-17), all of the material dates to the Early Classic. The material mostly corresponds to jars (Águila Red-Orange, Triunfo Striated, Quintal Unslipped, and Cubierta Impressed), although several bowls (Dos Arroyos Orange Polychrome, Águila Red-Orange, and Balanza Black) were also found.

**CBA-1-8-20:** No material was recovered.

**CBA-1-8-21:** The only active formation in the cave at the time of investigation is present in this feature—a small, dripping stalactite. Thirty sherds were recovered, all dating to the Early Classic. Most of the material corresponds to jars (Triunfo Striated and Águila Red-Orange), although several bowls (Águila Red-Orange and Dos Arroyos Orange Polychrome) were also present.

***CBA-1-9, Cueva de las Ventanas***

This is a laterally-eroded cave passage on the other side of the valley from Kaaminaq So'tz, creating a shallow rock-shelter with a series of entrances along the hill face. There is little dark zone, but there are a few scattered sherds throughout the cave.

***CBA-1-10, Cueva la Seca***

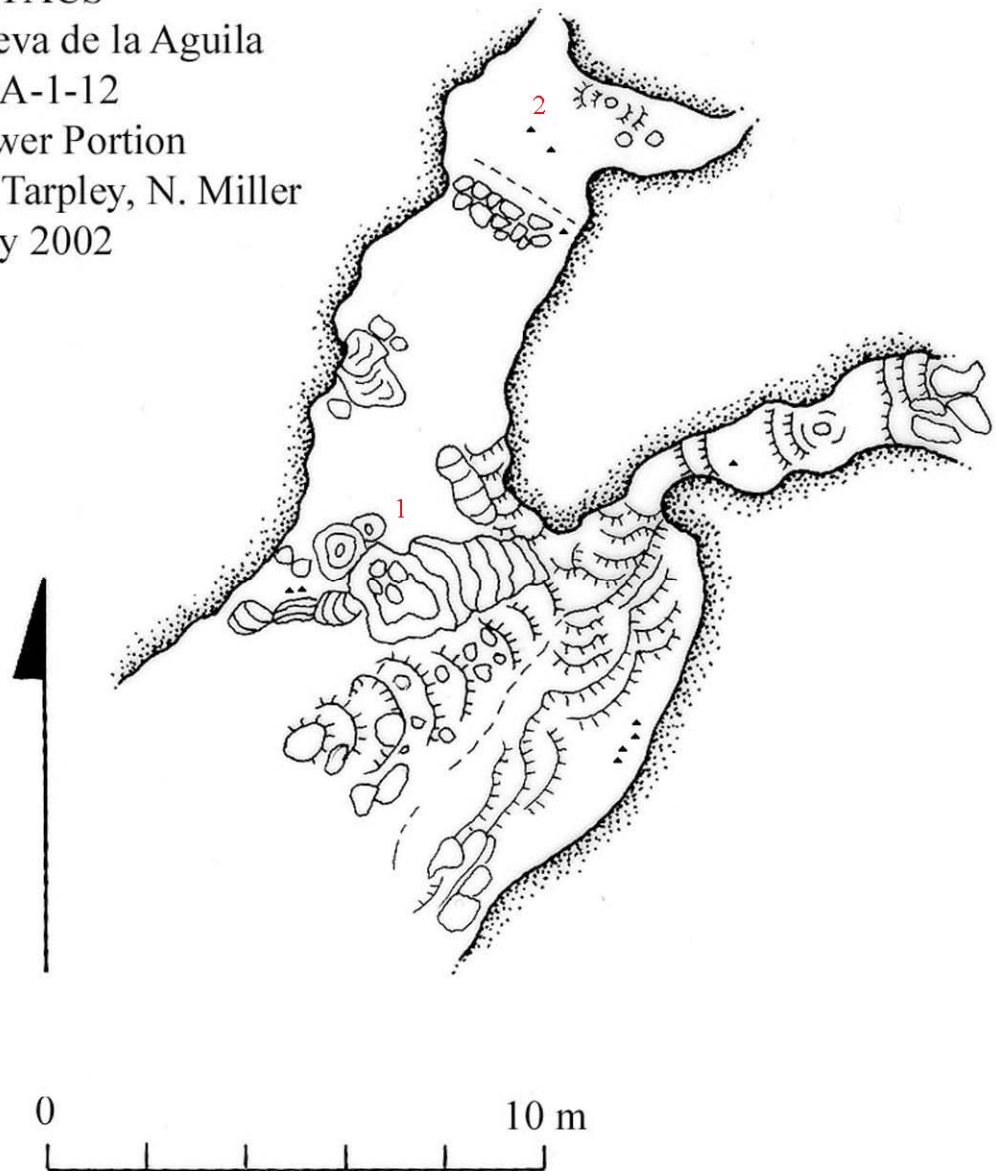
This is a long, narrow walkthrough connecting two different valleys, at one point blocked off by a large wall. When the team discovered the cave, the wall had been partially destroyed, leaving a crawlspace between the top of the wall and the ceiling. Most of the sherds were found on shelves on either side of the main passage. Two sherds were recovered—an indeterminate body sherd from a jar and a Sacluc Black-on-Orange plate.

***CBA-1-11, Och'och' Pek Be'***

This is a small walkthrough connecting two valleys. Ancient use is difficult to determine because of the disturbance in modern times. Since the further valley is connected only through that cave and is the location of the milpa of one of the residents, it is much traveled, and a modern wall was constructed to keep the pigs out of the milpa. All of the small crawlspaces have been blocked off with tepezcuintle walls. Two sherds were recovered, Cambio Unslipped jar rims from the Late Classic. A chert flake was also collected.

*CBA-1-12, Cueva del Águila*

VUPACS  
Cueva de la Aguila  
CBA-1-12  
Lower Portion  
M. Tarpley, N. Miller  
May 2002

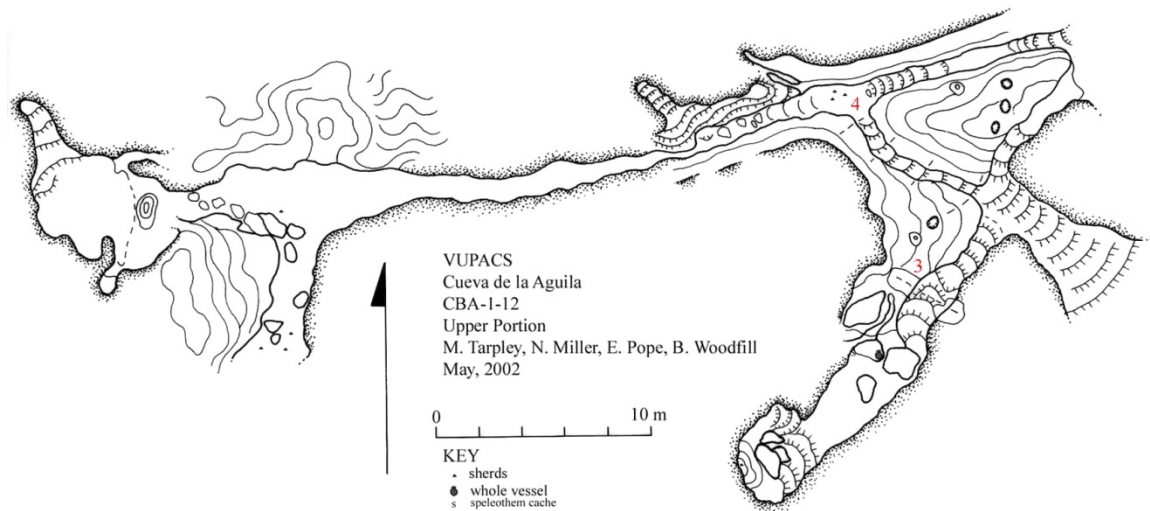


**Figure 3- 60: El Águila, lower part**

This is a snail shell-shaped cave, spiraling down from the summit of the hill and is in one place broken by erosion, creating two caves (figure 3-60 and 61) where the gap has formed. Both this cave and Cueva de la Barba (CBA-1-13) have whole vessels in them guarded by the local landowner. The vessel, a large water jar, was found in the

uppermost part of the cave behind large pieces of breakdown. It appears, however, that the pot was moved, probably in Precolumbian times, from a white crystalline chamber behind it at the uppermost extreme of the cave. Since part of it was covered in calcium carbonate deposits and it had no evidence of a kill hole, it is likely that it was used originally to collect *suhuy ha'*. *Águila* is another large cave with several small, relatively artifact-free chambers. One small stone line was built in another part of the cave with some evidence of ritual behind it, and the bottom "coil" is filled with artifacts and relatively fresh vegetal matter washed down from the rest of the cave.

**CBA-1-12-1:** This feature is found in the twilight zone of the cave. Sherds, a chert flake, and animal bone were reported. Sixteen sherds were recovered in a brief surface collection, all of which date to the Early Classic. Most of the material belongs to jars (Quintal Unslipped, Triunfo Striated, and *Águila* Red-Orange), although several basal-flanged bowls were also found (Dos Arroyos Orange Polychrome, Lucha Incised, and *Águila* Red-Orange).



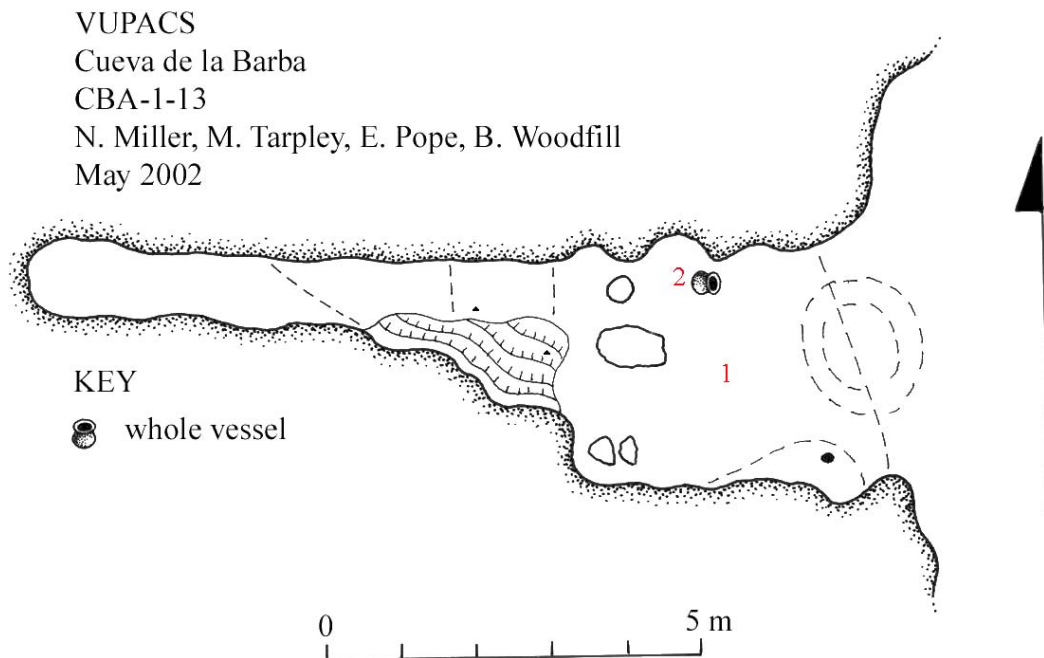
**Figure 3- 61: El Águila, upper part**

**CBA-1-12-2:** This feature is found in the dark zone of the cave and is separated from the rest of the cave by a wall of unknown age. Ceramics were reported and a chert flake was recovered.

**CBA-1-12-3:** A whole Cambio Unslipped jar was placed atop three large pieces of breakdown. The presence of calcium carbonate on parts of the vessel indicates that the vessel was likely moved, as the only active part of the cave is in CBA-1-12-4. The diameter was 26.4 cm and the wall thickness was 11.1 mm.

**CBA-1-12-4:** This part of the cave is active and the walls are glistening white. The floor is covered in guano, and several unslipped jar sherds are present, including part of a rim.

***CBA-1-13, Cueva de la Barba***



**Figure 3- 62: La Barba**



This is a small rock shelter (figure 3-62) which also contains a whole pot, another water jar, without a kill hole. It appears to have been buried and then dug up by a passerby, who then left it *in situ*. Investigations in this cave were limited by the presence of a large *fer-de-lance* that lived there.

**CBA-1-13-1:** Assorted ceramics and bone. One sherd was collected, a Bech Incised plate (Middle Preclassic).

**CBA-1-13-2:** A small Cambio Unslipped jar that had been buried near the cave entrance and uncovered by the curious landowner.

***CBA-1-14, Shelter***

This is a shallow horizontal crack (approximately 4 meters deep by 15 meters long and sloping down from a 2.5 meter tall entrance) along a hill slope 5 minutes to the southwest of La Caoba Vieja. In addition to surface collection, a 2x2 meter unit was opened. We found unusual material evidence in the shelter, including small bone fragments of at least 3 individuals, small pieces of animal bones, two obsidian prismatic blades, and broken metates, which might indicate that it was a dump for the ancient village. Two hundred and thirty-two sherds were recovered spanning approximately two thousand years (ca. 1000 B.C. to A.D. 800).

The only extant Early Middle Preclassic sherds in the sample were recovered from this cave (two Abelino Group tecomates) as well as the largest collection of Middle Preclassic plates (Juventud Red, Guitarra Incised) and bowls (Juventud Red, Guitarra Incised, Xexcay Fluted, Muxanal Red-on-Cream, Chunhinta Black, Pánfilo Dichrome, and Tierra Mojada Resist). The Late Preclassic material consists of jars (Achiotes

Unslipped, Zapote Striated, Boxcay Brown, and Baclam Orange) and plates (Sierra Red and Baclam Orange).

The Early Classic material is composed of jars (Dos Arroyos Orange Polychrome, Águila Red-Orange, and Quintal Unslipped) and bowls (Dos Arroyos Orange Polychrome, Balanza Black, and Águila Red-Orange), and the Late Classic material consisted of plates (Saxche-Palmar group, Imitation Saxche-Palmar Orange Polychrome), jars (Delgado Unslipped), and a cylinder (Yuhactal Black-on-Red).

Twelve chert flakes and a chert scraper were also recovered.

***CBA-1-15, Cueva de los Bordes***

N: 16 05 82

W: 89 59 36

This cave is located in the vicinity of La Caoba Vieja. It is a long pass-through cave oriented roughly northeast to southwest. A wall was built near the northeast entrance effectively closing off movement through the cave. Ceramics were scattered throughout the cave and several pieces of chert (including one recovered flake) were found near the southwest entrance, as were two looters' pits. Six sherds were recovered; with the exception of a complete Late Classic Pantano Impressed rim all of the material dates to the Late Preclassic (Juventud Red plates and bowls, a Guitarra Incised plate, and a Muxanal Red-on-Cream bowl).

### *The Eastern Edge of the San Francisco Hills*

A brief reconnaissance was undertaken to the largest natural feature in the region, a small mountain called San Francisco (Woodfill, Miller, *et al.* 2003), located on the eastern part of the hill zone. A follow-up investigation in 2004 was led by Jon Spenard in the surrounding area which focused on 12 different caves (Spenard 2006).

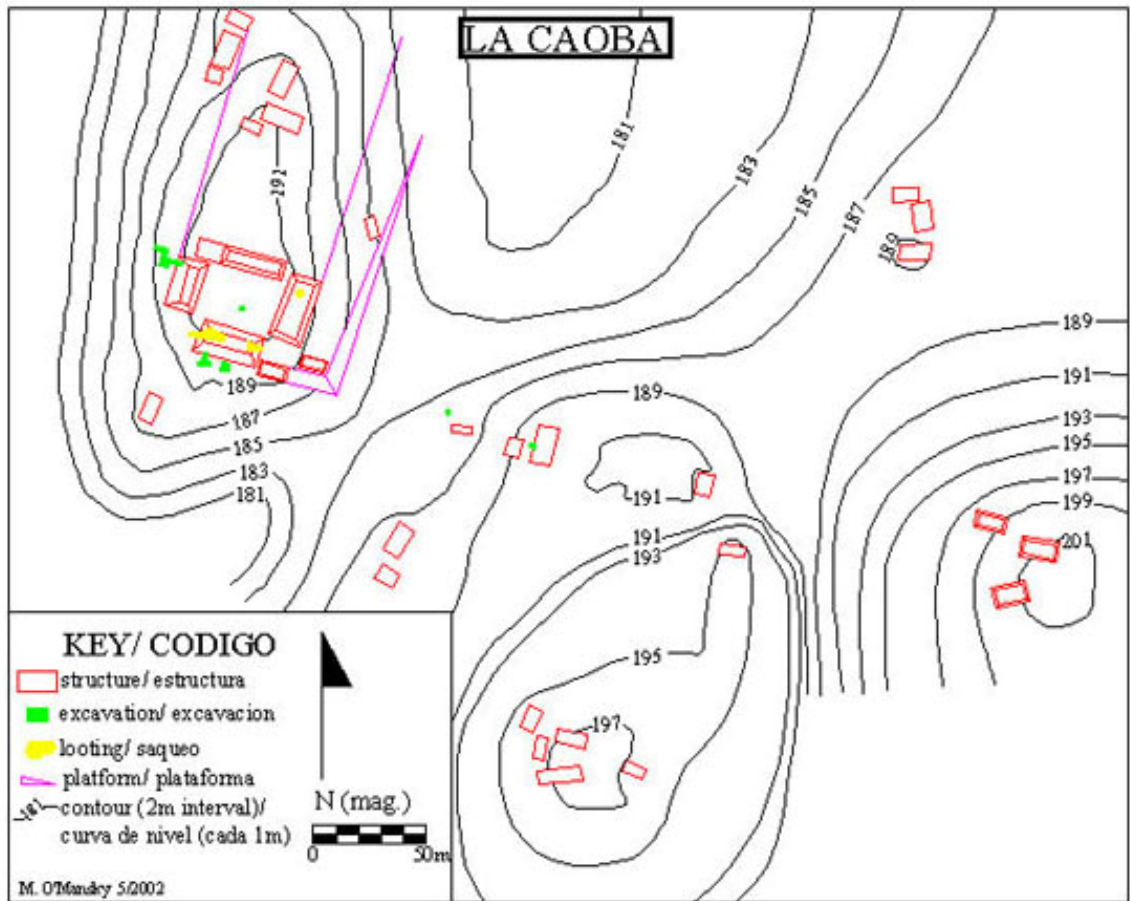
While the landscape is the same, the material evidence recovered by Spenard and his team was distinct. There was still a large amount of Early Classic material, but these caves had a much stronger Late Classic component, likely due to their closer proximity to Cancuen. In addition, several of the caves are used today by people from all of the surrounding villages, as one of the principal *tzuultaq'aeb'* (supernatural owners of the surrounding land) resides there.

### *La Caoba Vieja*

The archaeological site of La Caoba Vieja (figure 3-63) is located under the modern village that gives it its name. Located two hours from the nearest source of water, it was founded in the center of the San Francisco Hills, potentially to take advantage of ritual activity in the cave system, but certainly because it is atop a perched water table in the middle of an otherwise parched and barren landscape

Group A is located on the western periphery of La Caoba Vieja atop a large modified hill, and consisted of three different parts of the hill—one central rise and two lower terraces to the north and south. The central rise was leveled off with soil and ballast, and then plastered. The plaza group structures were all located on top of the

platform, which terminated in a wall from 1 course (south side) to 3 courses (west side) tall.



**Figure 3- 63: La Caoba Vieja**

The eastern front of the hill was severely modified, with two consecutive staircases separated by a large platform providing a public-private interface for the residents of the acropolis. Access into the compound then becomes increasingly restricted—a narrow staircase leads to an inlet in the top of the acropolis, which is completely blocked off except for a small entrance into the plaza between the corners of buildings A-1 and A-4.

The group presently has a few varied uses, serving as a scavenging ground for pigs, a place to store firewood, and is the location of the local schoolhouse's latrine. A

looters' trench was begun in the western side and cut laterally through about 1/3 of the largest structure, and a smaller one was begun on the east. The platform fronting the hill is presently occupied by a resident of the modern community. Both the northern and southern terraces of the acropolis have been severely disturbed—the southern terrace is the location of the schoolhouse, built over most of the midden associated with Structure A-1, while the northern terrace has been converted into a cemetery.

Most of the excavations point to a Late Classic, Cancuen-sphere population, but the digging was for the most part limited to middens. Whenever excavations did cut through structures, earlier materials, most often Early Classic, were found in very small quantities. A naturally disturbed skeleton was also found in several articulated parts behind the principal structure. It was associated with refuse-non-human bone, ceramics, and a large quantity of obsidian and chert, and appears to have slumped down before it fully decayed.

Other excavations were undertaken in La Caoba Vieja, most importantly in the ancient (and modern) aguada, which revealed a single sherd from the Middle Preclassic, different-sized jars, and a metate (Bill *et al.* 2003; Woodfill, Fahsen, and Monterroso 2006). Former work on the aguada by the residents of La Caoba revealed a skeleton associated with two whole vessels.<sup>8</sup>

### *Summary of the San Francisco Hills Data*

While the San Francisco Hills never appear to have gained the importance that Hun Nal Ye and Candelaria enjoyed, the caves were used over a much longer period of

---

<sup>8</sup> a similar aguada-grave was found at Cancuen in Grupo Los Patos, excavated in 2002 by John Tomasic (2002)

time, beginning around 1,000 B.C. and continuing uninterrupted until the collapse at Cancuen (about A.D. 800). As was the case in all of the other cave systems, the vast majority of the material evidence dates to the Early Classic, although a smaller portion of the material appears to be exotic. In fact, the material from the caves from this time period is much more related to the Southern Petén than the Candelaria system, and the exotic material present links the system with the Southeastern, and not the Central, Petén. The Late Classic material is a part of the Cancuen sphere in both the caves and the settlement, although a probable incensario fragment was recovered that was sourced to Salinas de los Nueve Cerros by Ron Bishop (pers. comm. 2006).

It is odd that the San Francisco Hills have such a long history, as they are the most out-of-the-way features studied in the region. The outskirts of the hills are several hours by foot from the Río Pasión and the caves with the longest history are located in the center of the system. Unlike the caves described above, they do not seem to have been on the way to anywhere, which would explain the more sporadic use. However, the hills stand in jarring contrast to the surrounding landscape, unlike the other cave systems, so it is possible that they have simply been more obvious and attractive to travelers through and residents of the region for a longer time.

One of the interesting aspects to the artifact assemblages in the caves is the quantity of chert, especially chert cores, that have been encountered. They appear to be, like the rest of the cave material, in a ritual context, with no evidence of processing associated with them. Chert in many parts of the Maya World does have ideological associations, and is often found with tombs. Many modern altars include chert offerings,

but it is presently unclear what chert in apparently random places would be doing in the caves.

## V. Other Sites discussed in this Dissertation

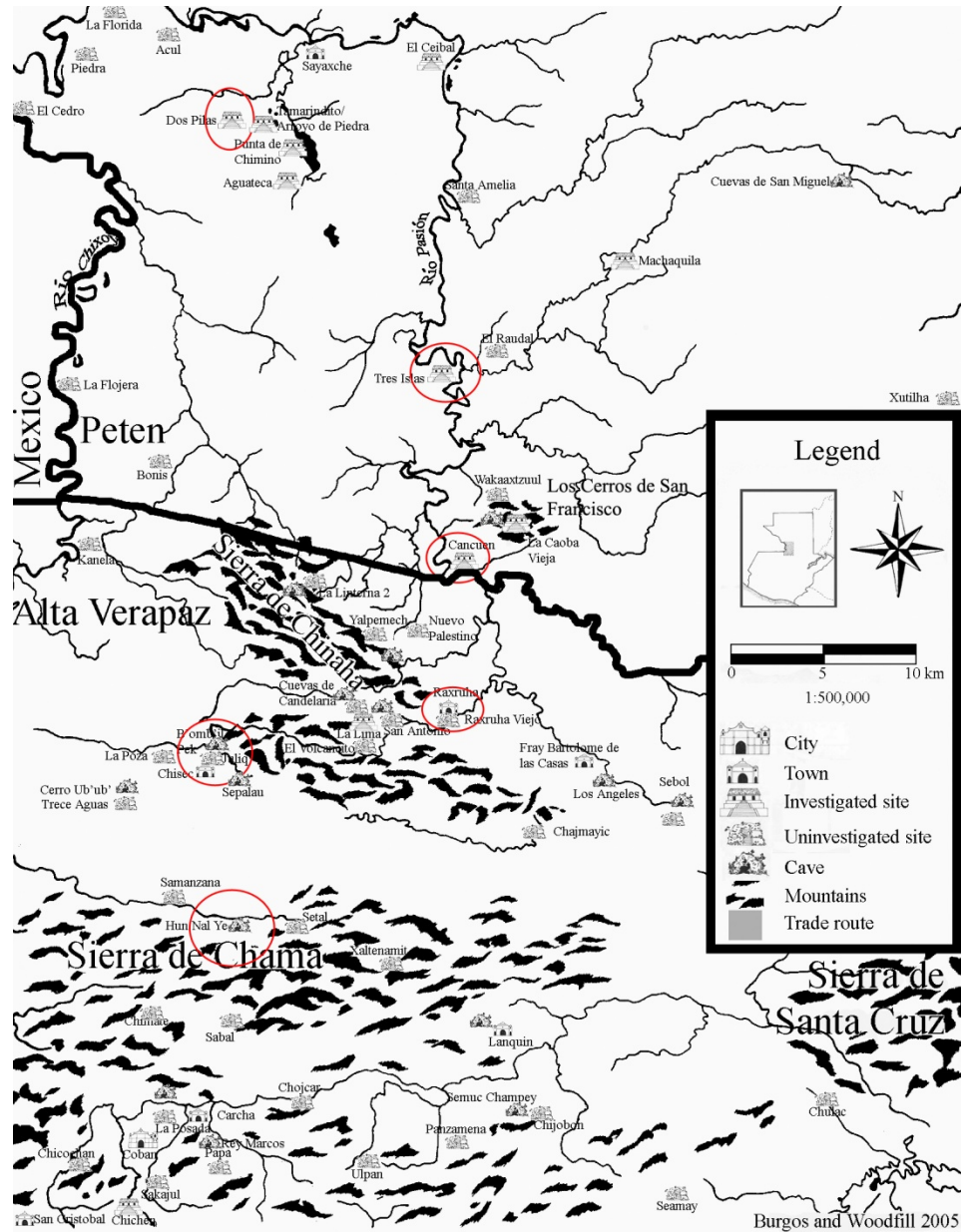


Figure 3- 64: Other sites discussed in this dissertation

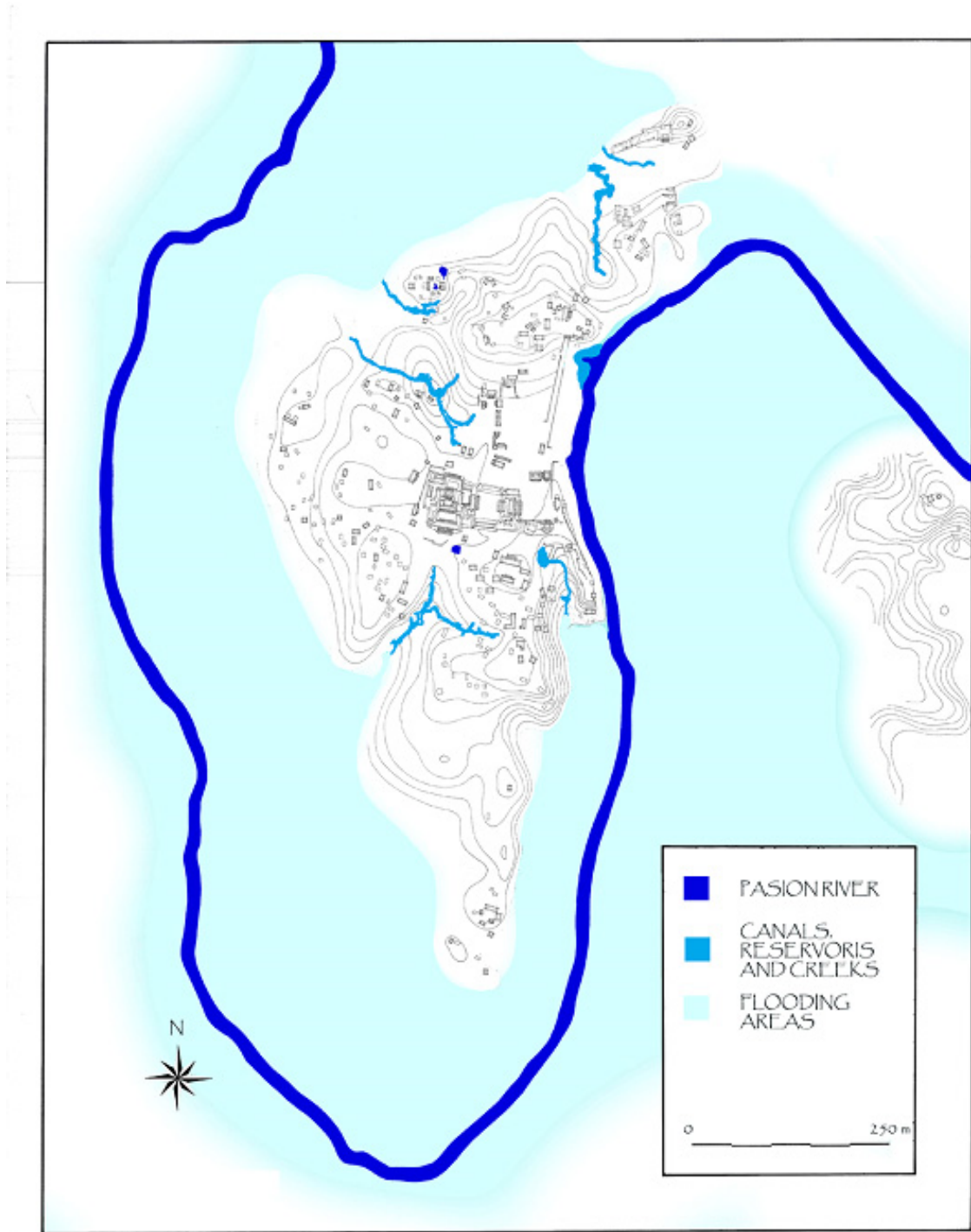
Several other sites in the region (figure 3-64) are central to understanding the history of the region and are briefly discussed below. The El Chotal Regional Archaeological Cave Survey, directed by Jon Spenard, investigated a series of caves in the eastern side of the San Francisco Hills (Spenard 2006), the results of which help to understand the Hills as a whole. Tres Islas (Tomasic and Quintanilla 2004, Tomasic *et al.* 2005, E. Barrios 2006), the northernmost shrine included in this study (located 10 km north of the San Francisco Hills and 30 km north of Hun Nal Ye), was excavated by John Tomasic and his team. Unlike the other shrines, Tres Islas is a constructed ritual place, consisting of a stela platform atop a hill. There are also several small architectural groups, although they are not of concern in this investigation.

### ***Dos Pilas***

Dos Pilas was founded on the shores of Lake Petexbatun around A.D. 600 to maintain control of the river route by Tikal (Demarest and Fahsen 2002). The city was hastily built and quickly began a campaign to conquer sites that were challenging Tikal's control of the area. Dos Pilas soon shifted its alliance to Calakmul, however, and a period of warring and shifting alliances began in the region in order to consolidate control of the river route by the two superpowers and their proxies (Demarest 1997, Martin and Grube 2006). In 780, it appears that the region erupted in violent warfare (Demarest 2006). Defensive walls were built around the most-defensible compounds, at times using steps from the hieroglyphic stairs and whole temples in reaction to an immediate threat. These defensive measures appear to have failed, however, as the region was quickly abandoned.



*Cancuen*



**Figure 3- 65: Cancuen (during the rainy season)**

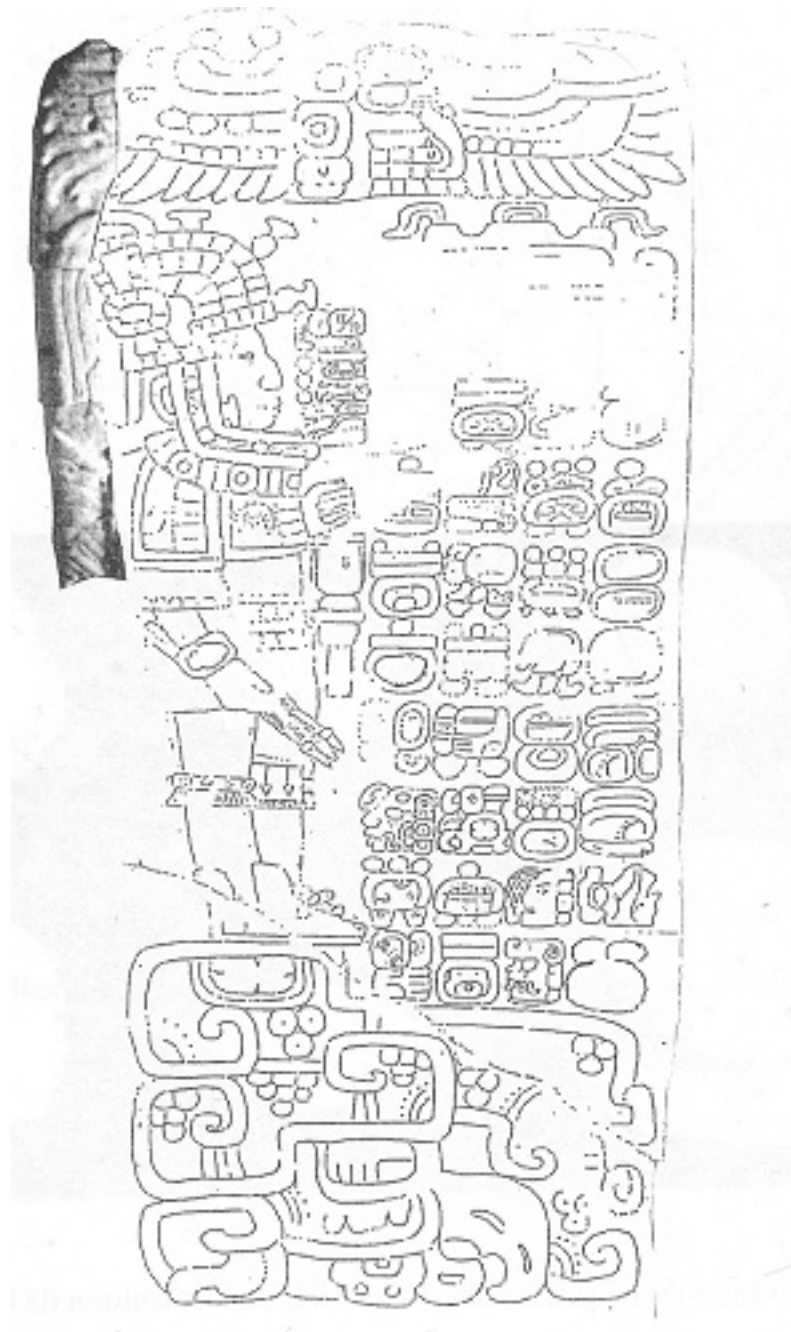
Much like Dos Pilas, Cancuen (figure 3-65) was founded at the beginning of the Late Classic, and was firmly established as an ally of Calakmul after the seating of the non-native Ruler 3, which was conducted under the auspices of the superpower (Fahsen *et al.* 2001). Within a generation, Cancuen and Dos Pilas created an alliance which held until the fall of Dos Pilas. Cancuen soon followed, with the city being fully abandoned after a dramatic massacre around A.D. 830 (Barriéntos and Demarest 2006). The final residents of the site, who were in the middle of renovating their palace and other elite structures, apparently abandoned their efforts to build defensive fortifications which were never completed. The final lord, K'an Maax, was hastily buried in an unfinished tomb and over 20 people were found dismembered in the sacred well in front of the palace.

Research conducted by the Cancuen project revealed direct evidence of its importance in the Late Classic political landscape. Two large jade workshops were uncovered (Kovacevich 2003), with refuse from each stage of production, from modifying the raw jade to finishing touches in pendants and sculptures. In addition, there were myriad other workshops with evidence of obsidian and pyrite production, as well as several “empty” workshops which could have been used for working with perishable goods from the highlands.

### ***Tres Islas***

Tres Islas is one of a handful of known sites that pre-date the Late Classic in the region. The site was small, mostly consisting of a few mound groups on a levee at the confluence of the Ríos Pasión and Machaquila. In spite of its size, however, it was an

important site, as three detailed stelae were erected in A.D. 475 to commemorate a series of events beginning about 70 years earlier (Tomasic *et al.* 2004).



**Figure 3- 66: Stela 2, Tres Islas**

The site was first identified by Ian Graham in 1965, and Tres Islas was declared a national park in 1970 (E. Barrios 2006). It lay untouched, however, until a team of

Cancuen Project archaeologists led by John Tomasic conducted excavations at Tres Islas in 2003 and 2004 (Tomasic *et al* 2004, E. Barrios 2006, Tomasic and Quintanilla 2003), excavating the stelae platform and two of the mound groups. They determined that the site was founded in the Late Preclassic and continued to be occupied until the Terminal Classic. The ceramic materials uncovered there showed an early association with other sites in the southern Petén, ones that continued through most of the Early Classic. By A.D. 400, however, three erected monuments and associated caches were filled with international objects and imagery—Pacific and Caribbean shells and corals, fine carved jade objects, a plethora of prismatic blade cores, Tzakol-sphere vessels, and, carved into each stela, a Teotihuacano warrior (figure 3-66).

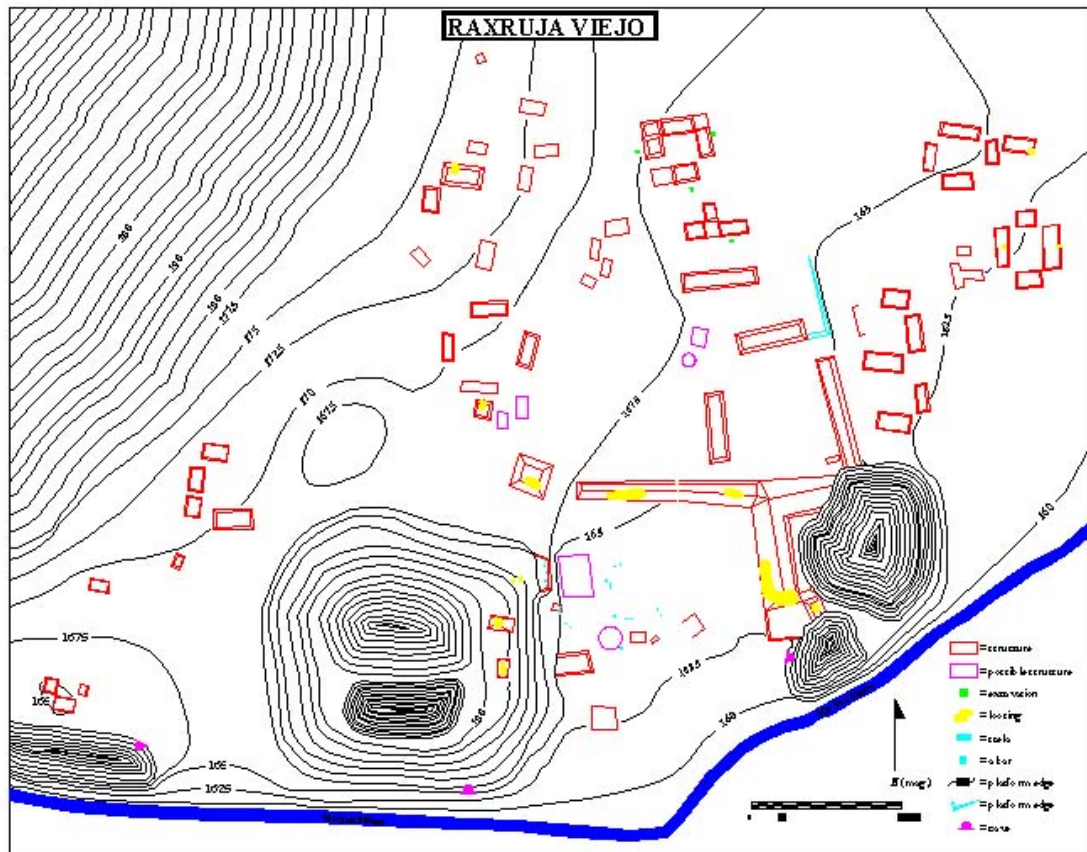
The importance of the settlement itself is doubtful—it never achieved more than a handful of inhabitants, but appears to have been a territorial marker for residents for the nearby city of El Raudal (Tomasic, pers. comm. 2004), which was likely the Early Classic seat of power for the Pasión Kingdom. Tres Islas was placed at a strategic point, at the confluence of two rivers, and appears to have been an important shrine during this time period.<sup>9</sup>

After the Early Classic, the site was still very much in use. Like the other areas described above, however, the recovered materials were much more local in nature; here, as in the San Francisco Hills, it appears that the inhabitants and ritual practitioners were a part of the Cancuen sphere.

---

<sup>9</sup> Tomasic suggests that the stelae-altar complex could have served as an e-group (Tomasic *et al.* 2004), and it was certainly oriented correctly to have been one.

## Raxruha Viejo



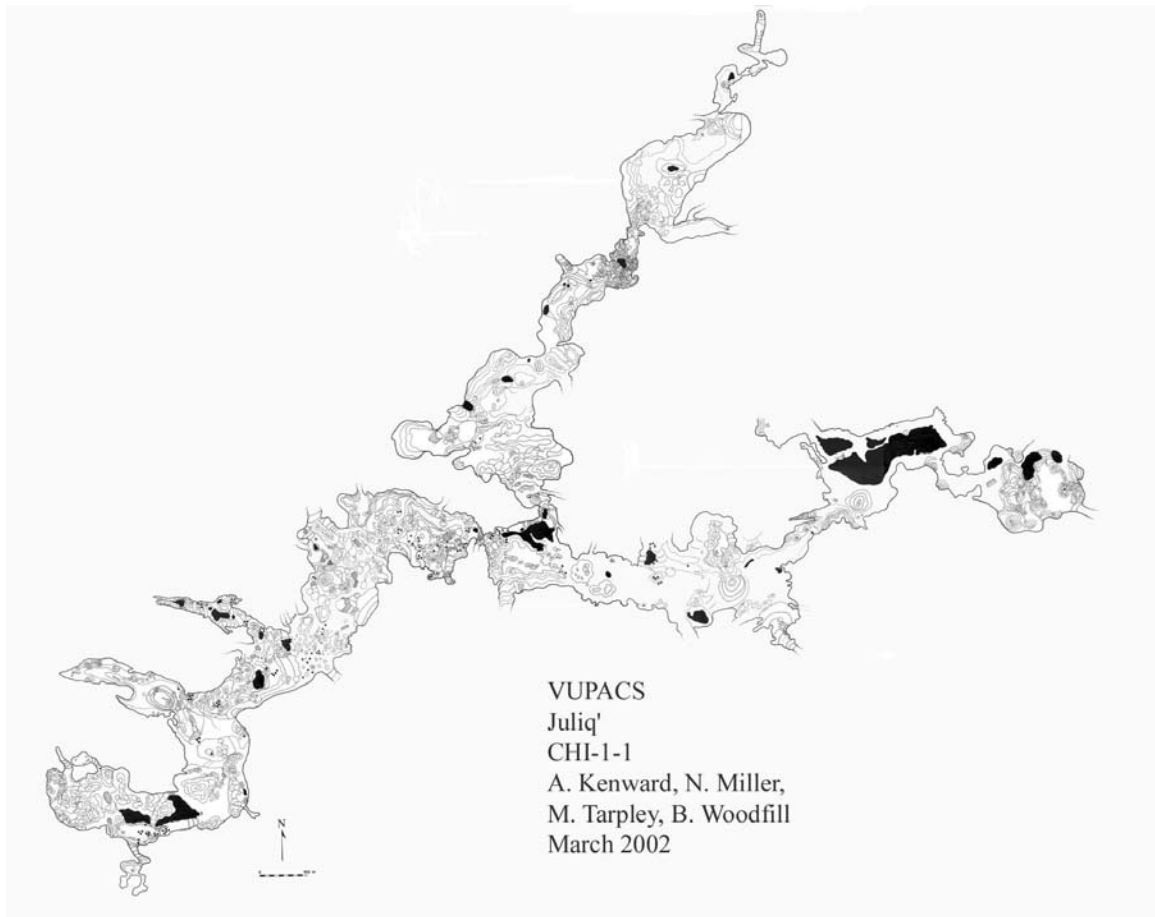
**Figure 3- 67: Raxruha Viejo**

Raxruha Viejo (figure 3-67, O’Mansky 2003, Morán and Pereira 2003, Ohnstad 2004) is a large center several kilometers south of Cancuen and about 5 km east of the Candelaria Caves, surrounded by the last foothills from the Cuchumatanes. Its palace complex is built into the side of a hill next to a small cave opening, and a platform that appears to be the primary temple associated with it is built into a large, pyramidal hill and topped with a row of uncarved stelae and altars.

The site was first mapped and reported by Patricia Carot (1987, 1989), who noted two artifacts given to her by the landowner—part of an Early Classic polychrome bowl, and a Late Classic figurine head. All research conducted by the Cancuen Project,

however, show an exclusively Late Classic population that appears to have many of the same ceramics, stone tools, and settlement patterns typical of La Lima and other contemporaneous northern highland settlements.

### *Juliq'*



**Figure 3- 68: Juliq'**

Juliq' (figure 3-68, Dreux 1968, 1974; Carot 1976, 1980, 1987, 1989; Woodfill, Miller, *et al.* 2003) is a large cave with evidence of both ancient and modern use. The cave is naturally divided into four different sections, labeled I to IV. Juliq' is entered through a narrow crack in the ground at the base of a ridge, at which point it bifurcates into Part I and Part II. Part I has become the tourist part of the cave; the formations have

ceased to grow and no archaeological remains have been recovered. Several skylights cut through the darkness and the rock floor is buried in at least 6 meters of clay, as evidenced by a large, recently dug pit near the entrance of the cave.

Part II is separated from Part I by a large hill of clay that is the result of accumulated soil below another skylight near the main entrance. While there is some evidence of ancient use—mostly sherds scattered on the ground—the most interesting part of this section is the presence of two modern altars. Altar 1 is a large flat rock with some stacked sherds and colored wax left over from different modern rituals. Altar 2 is more complicated, with a hearth filled with soot and copal resin, evidence of many candles of different colors, a hand-rolled cigar, modern bird bones, and a series of crosses painted with blood and *b'oj* (cane liquor) on surrounding formations. In front of the altar is evidence of another ceremony—a large piece of a comal is surrounded by burnt *manaco* leaves, copal resin, and charcoal.

Part III, accessible by a small tunnel from Part II, has the most evidence of archaeological use. Originally discovered and mapped by French explorer Daniel Dreux, this part of the cave had at least three whole vessels cached within, including an elaborate incensario. However, only one vessel appearing in his map was still present at the time of our investigations, one that was immovable because of the intricate series of fractures that formed when the pot was "killed." This Late Classic vessel was placed on a natural three stone hearth of three small stalagmites on a ledge approximately 1.3 meters tall. It contains burnt organic residue and evidence of fire is present below the pot. A small obsidian blade was found on the cave floor in front of the ledge. At the end of the ritual conducted here, a small stone was thrown into the pot, breaking the jar's bottom.

Fortunately, the act of "killing" the pot resulted in a latticework of cracks in the vessel itself, which discouraged looters from taking it.

The passage is still very much alive and dripping, and has several large stalagmites over 4 meters tall. Under the breakdown associated with these stalagmites, we found what appears to be peccary bones, potentially painted with Maya blue. Interestingly enough, users of the modern Altar 3 several meters away left behind pig bones. Several other areas of modern and ancient use were scattered throughout this section, as were tied pieces of plastic from another cave survey. Towards the back of Part III, a precarious climb leads to a small series of passages with paintings, including negative handprints, and a half-jar placed under a dripping formation. Recently-broken potsherds were found underneath the ledge in front of these passages which had been stacked by some modern visitor.

Part IV of the cave, accessible from Part II by a long, narrow passage, also has a modern altar, a small table with evidence of candles and burning (Altar 4). A side passage beyond it, a low passage bounding a long, shallow puddle, has soot from candles and, finger painted on the wall with clay from the floor, the words "Dios te ama." The most interesting part of this passage (the so-called Chupanalgas Chamber) is behind Altar 4 and beyond a small crawl-through. In an area otherwise devoid of evidence of human activity, the walls are covered with charcoal drawings.

The drawings are divided into five different types: abstract geometric, which mostly consist of abstract sketches and simple shapes; anthropomorphic, which are limited to faces and silhouettes; negative handprints (three paintings in total, one right hand and two using both the left and right hands to create a silhouette of a bird's neck and



head); zoomorphic, (a winged snake, a bat, and a quadruped); and potential glyphs, limited to the last painting in the series, a painting on a curtain ledge above the path floor which appears to be a cartouche with a bar and dot number associated with it, potentially reading 8 Ahau.

### ***B'omb'il Pek***

Access to B'omb'il Pek (Dreux 1968, 1974; Carot 1976, 1980, 1987, 1989; Woodfill, Miller, *et al.* 2003) is difficult, beginning with a difficult descent into a sinkhole—eight meters down vines, roots, and the rock face. The floor of the sinkhole is blanketed in sherds and obsidian blades. Beyond the sinkhole, the cave is even more restricted. It is entered by climbing up the opposite side of the sinkhole and squeezing through a hole with a diameter of about 60 centimeters that is nearly a meter thick. The cave opens into a room with another tight squeeze-through, and on the other side of this is a large chamber for which the cave is named—above and on the other side of a large chasm, the ancient Maya painted several animals, including monkeys and jaguars. Recent vandalism has damaged these paintings, but fortunately, they had already been recorded by Carot (1989) and Dreux (1968).

### ***B'omb'il Pek Ruinas***

Both of these caves appear to have been used by the ancient community of B'omb'il Pek (discussed in Carot [1989]), which is a small site with the region's only known ballcourt outside of Cancuen (O'Mansky, pers. comm.). Residents here, like at Raxruha Viejo, incorporated the natural landscape into their architecture, with another platform abutting

a large hill. Buildings in the A-Group, the principal group in the site, are incorporated into the ballcourt's I-shape and the court is separated from the plaza through a one-course wall extending from the western structure several meters and covers about ½ of the north edge of the court, leaving the rest open.

## **VI. The Pasión-Verapaz Shrines**

The Pasión-Verapaz Shrines—Hun Nal Ye, the Candelaria System, the San Francisco Hills, and Tres Islas, while initially appearing to be quite distinct from each other, all follow along much of the same historical trajectory and demonstrate many of the same patterns. All have humble Preclassic beginnings followed by an explosion of ritual activity, much of which has exotic associations, during the Early Classic, which is then followed by a decrease in overall material remains that demonstrate a distinctly local tradition. Outside of the shrines, however, there is little evidence of occupation until the Late Classic, at which point the local population grows exponentially.

While several scholars (Hammond 1972a, Arnauld 1990, Demarest and Fahsen 2002) have posited that the Upper Pasión and northern Alta Verapaz were parts of a major Maya trade artery, the view from the surface is that the region was a backwater, with very little evidence of occupation until the Late Classic boom. Research in caves and other shrines is revealing a more complex picture, with fluctuating boundaries between the highlands and lowlands and “Maya superpowers” vying for control of the area much earlier than previously thought. The route from the Salamá Valley down to the Pasión and Usumacinta is one of the easiest ways to transport goods into the

lowlands, and for that reason the Maya took advantage of it, not just during the Late Classic, but the 1700 years preceding it.

More than revealing the hidden history of this region, the importance of this study lies in the use of caves and other shrines as a way of understanding larger issues. Caves have only in recent years been accredited with more than a modicum of importance, and few studies (McAnany 2002, Dunham and Prufer 1998, and, especially, Brady, Scott, *et al.* 1997) have attempted to correlate cave use with settlement. What this investigation reveals is that caves can not only contain important data of ritual activities (Chapter eight) but can provide ample evidence of larger patterns of transit and politics (Chapters five to seven), providing a basic skeleton to be filled out with future investigations.

## CHAPTER IV:

### LABORATORY METHODOLOGY

#### I. Introduction

The primary focus in the laboratory was ceramic analysis—it is the most common material found at most sites in the Maya world and the most sensitive for establishing chronologies and examining interactions among different groups.<sup>1</sup> Two typological systems have been used in the Maya world in order to describe and compare different assemblages—the ware system and the type:variety system. Most early archaeological projects (*e.g.* Vaillant 1927; Butler 1940; Kidder *et al.* 1946; Wauchope 1948; R.E. Smith 1952, 1955) used the ware system, and although its use has continued in the highlands, the type:variety system has dominated lowland Maya archaeology since the 1960s (*e.g.*, R.E. Smith and Gifford 1966, R. Adams 1971, Rands 1974, Sabloff 1975, Gifford 1976, Culbert n.d., Pring 1977, Dillon 1979, Forsyth 1989, López Varela 1989, Laporte *et al.* 1993, Laporte 1995a, Foias 1996, Forné 2005). While the type:variety system has occasionally been used in the highlands (Sharer 1978; Demarest 1986; Sharer and Sedat 1987a; Willey, Leventhal, *et al.* 1994), most highland ceramicists have continued to use the ware system (Wauchope 1975, Ichon and Hatch 1980, Hatch 1997, Romero 2006). In the northern highlands, a system combining characteristics of both ware and type:variety has commonly been used (Becquelin *et al.* 2001, Becquelin and Baudez 1984, R. Viel

---

<sup>1</sup> While many of the other artifacts including lithics were analyzed, they are not the primary focus of this dissertation, and are described in Appendix A.

1984, Ichon and Arnauld 1985, Arnauld 1986, Ichon 1992), here designated “the French school.”

The Pasión-Verapaz region is located at the interface of these analytic traditions as much as it is at the interface of different ceramic traditions. While the ceramic assemblage is related to both highland and lowland materials, the variant taxonomic systems make direct comparison difficult. Before beginning a discussion of the ceramics in the following chapters, I will first briefly describe the three different systems used by the different projects. Following this description, I will discuss the specific methodology used in the ceramic analysis of the present assemblage.

### *The Ware System*

While ceramics were occasionally reported by early Mayanists (*e.g.* Dieseldorff 1894; Seler 1993a; Saville 1916, 1919), they were normally limited to brief descriptions of exemplary vessels and treated as works of art. The first attempt to systematically analyze Maya ceramics was undertaken by Vaillant (1927). Considering that “a universal time gauge ought to be a medium not subject to disappearance in its breakage or decay” (Vaillant 1927:5), he examined ceramics from different parts of the Maya world in an attempt to organize them into chronological phases. He recognized a second benefit to his work, that it was possible to plot movements of people through potsherds (Ibid. 11).

Vaillant recognized four different ceramic attributes—paste, slip, decoration, and form. His primary unit of analysis was *ware* (Ibid. 14), which was defined by paste and slip. Wares could be further divided into *types*, which were defined by differing

decorations. Form was central to dating the material, but was not a determining factor in the classificatory system.

The following generation of scholars (Butler 1940; Kidder *et al.* 1946; Wauchope 1948; R.E. Smith 1952, 1955) based their ceramic analysis on his “ware” system. There has been little attempt to codify the system, although Marion Hatch (1997) has recently summarized it. Vaillant’s four attributes—surface treatment, paste, form, and decoration—have been maintained. There is a hierarchical relationship among the four, with surface being the most important in identifying a ware, followed by paste, form, and, finally, decoration.

The ware system is very flexible and has several advantages. Unlike the type:variety system (see below), there is more of a holistic approach to the system, so even heavily-eroded collections can be classified. In addition, since all four factors are examined, it is possible to trace relations among different wares over time and space.

There are several significant disadvantages to the system, however. Since surface treatment and decoration were considered to be key to defining “ceramic units which approximate those in vogue” (R.E. Smith *et al.* 1960:330), an emphasis on all four of the characteristics made a refined chronological sequence difficult. In addition, the system proved to be highly idiosyncratic, and lack of attention to one or more attribute by particular ceramicists made standardization almost impossible (*ibid.* 331). Instead of a broad comparative framework, the ware system was often applied in finding patterns in a specific ceramic assemblage, not in imposing a pre-existent typology onto the sample. This proved to be highly disadvantageous, since it prohibited discussions of relationships among sites and regions.

### *The Type:Variety System*

The type:variety system in Maya archaeology was largely made possible by the book *Ceramic Sequence at Uaxactun, Guatemala* by R.E. Smith (1955), which used a modified ware approach that organized ceramics primarily on a chronological level according to *complex* (time period). At least during the Classic period, Smith was able to split up the complexes ever further, and many of the sherds were dated to a 100- to 150-year time frame. This was made possible by comparing the ceramics from selected trenches to the large sample of whole and partial vessels found in dated tombs or associated with other dated constructions.

The ceramic assemblage was then further divided according to surface treatment and form, with further modes and measurements for each category summarized. Different types of decoration were tabulated according to time period and primary surface treatment, and the sample was briefly compared to pre-existing collections throughout the Maya world.

In comparison to earlier studies, however, the absence of paste description in the Uaxactun report is glaring—in the two volume work, only a 5 page contribution by Anna Shepard (1955) is devoted to paste. Five years after the book was published, Smith (together with Willey and Gifford) published an article entitled “The Type-Variety Concept as a Basis for the Analysis of Maya Pottery” (1960) that outlined a system based on a synthesis of two recently-proposed concepts (the “type” and the “variety”) for eastern and southwestern American archaeology (Phillips 1958; Wheat *et al.* 1958).

In the system R.E. Smith *et al.* (1960) laid out, the basic unit of analysis was the ceramic *variety*, which was considered to be the smallest meaningful unit into which the

collection could be divided. The *type* was composed of either a single variety or a group of varieties that have identical surface treatment and chronological positioning, but differ in other subtle ways. Another way of looking at a type is a unit based on similar surface treatment and decoration (glossy black slip with geometric incisions, for example). The label applied to a type is in two parts, a name that is unique to the type (suggested to be taken from local place-names by the authors) and a description of the defining characteristic of the type (the example above in the Late Classic lowlands would, thus, be Carmelita Incised). The dominant variety for the particular type takes the same name as the type. Other varieties can take either place-names or descriptive labels (in the present study, for example, I have three varieties for Dos Arroyos Orange Polychrome—Dos Arroyos, Candelaria, and Orange Paste).

This analysis was largely based on two observable traits, *attributes* and *modes*. The former consists of “paste, rim shape, surface color, and all other observable criteria found to have come together in a variety” (R.E. Smith *et al.* 1960:331), while the latter is an attribute that appears in a cross-section of the sample. A good example of an attribute would be a glossy, mottled black slip, which appears only in a single group in the Early Classic (Balanza). A large basal flange, on the other hand, appears in most groups during the same time period, so it would be considered a mode.

In R.E. Smith *et al.*'s proposed system, the ceramicist was told first to sort the material into relevant ceramic units through attributes and modes, and then assign types and varieties in consultation with work done in neighboring areas. The types were then organized into various wares. No explicit definition was given in this article, nor in the report on the 1965 Ceramic Workshop (Culbert 1967), where the system was codified—



ware was defined as a category used “to make inferences about economic features such as manufacturing centers and trade” (Culbert 1967:92).

After the 1965 Ceramic Workshop, Smith and Gifford published the first published type designations, *Maya Ceramic Varieies, Types, and Wares at Uaxactun: Supplement to “Ceramic Sequence at Uaxactun, Guatemala”* in 1966 (R.E. Smith and Gifford 1966). A new level to the ceramic analysis, the *group*, was established between these two publications, which is an umbrella for all of the types with similar surface treatment (e.g., all of the black-slipped types in the Early Classic, regardless of decoration).

This publication also deviated in a major way from the original conception of the type:variety system—the type became the primary unit of analysis. This was largely because the designations were based on the illustrations and descriptions in the monograph and not on the sherds themselves, since the Uaxactun collection was largely unavailable to reanalyze (Bishop, pers. comm. 2007). This had a secondary repercussion—while these types became the basis of lowland ceramic analysis, they were never well defined and, again, paste was relegated to a very marginal status.

#### *Type:Variety Growing Pains*

The type:variety system quickly took hold in many parts of the lowlands, beginning with Adams’ and Gifford’s dissertations (both of which were defended in 1963) on the ceramics of Altar de Sacrificios and Barton Ramie, respectively. These two works strongly emulated the original model defined by R.E. Smith *et al.* with the variety level being the most important classificatory system, although Gifford also included the

group level. Work at Tikal (Culbert n.d.), Palenque (Rands 1987), Mayapan (R.E. Smith 1971), and Seibal (Sabloff 1975) as well as the publication of Adams' dissertation (1971) and an expansion of Gifford's work published posthumously (Gifford 1976) made the system the norm for the Maya lowlands. However, problems with the system soon became apparent, most notably the lack of consistency among the different studies.

The main problem appears to have been that the system was vaguely established and no single work was proposed as a model upon which future investigations would be based. Sabloff's work at Seibal (1975), for example, did not establish varieties for the majority of the types (since the procedure for establishing local varieties of pre-established types was never laid out), while Dillon's work at the nearby Salinas de los Nueve Cerros (1979) established all new ceramic units as varieties of "unnamed red," "unnamed orange polychrome," "unnamed striated," etc. Very subtle differences in surface treatment or the lack of opportunity to compare samples led to splitting up one probable type into several established types or falsely identifying a local type as an established type from a different part of the Maya world.

Sabloff and Smith (1968) attempted to reign in scholars through their article "The Importance of Both Analytic and Taxonomic Classification in the Type-Variety System." Although it was published in the same journal as the previous article by R.E. Smith *et al.*, for the first time, a succinct, concrete, and easily-understandable set of definitions for the various levels of analysis were available to the general archaeological public.

Continuing with the trend started with R.E. Smith and Gifford's *Supplement* (1966), the type was formally established as the main analytic unit, and by this time the ware concept had divorced itself completely from its original meaning. It was defined as

“an assemblage in which all attributes of paste composition (with the possible exception of temper) and surface finish remain constant” (Sabloff and Smith 1968:278), and it was emphasized that wares are not limited to specific time periods.

Around the same time Sabloff and Smith published this article, the type:variety system came under fire from a variety of fronts. Some of the major critiques have been its tendency to “pigeon-hole” (Wright 1967:99); the strained, artificial nature of the classificatory system (Dunnell 1971); its rigidity (Hammond 1972b); and the focus on sherds instead of whole vessels, resulting in single, fragmented vessels being given multiple type designations (Demarest 1986). One of the most damning critiques was M.E. Smith’s (1979) attempted re-analysis of the Barton Ramie collection, during which he discovered that the classifications by Gifford were largely irreproducible *in the same collection*, even by examining the field and laboratory notes.

Later studies attempted to take these criticisms to heart as well as another glaring problem in the system—the Uaxactun ceramics, which were the base for much of the research in the Petén, were never well-defined by Smith, and the chronological placement of the different types was not determined by any intrinsic characteristic of the individual sherds but by context. This is most apparent in the Preclassic (Forsyth 1989), where very subtle differences between the Late Middle and Late Preclassic periods were overly emphasized by not only different type designations but different ware designations for the slipped materials. In the Classic, where both the Early Classic Tzakol complex and the Late Classic Tepeu complex were each divided into 3 sub-complexes which normally had distinct types even if there were no clear distinctions with their chronological neighbors.

While the type:variety system has improved in recent years, many problems still exist. Earlier studies tended to split samples into a large number of types, so contemporary ceramicists have tried to reign this in, subsuming nearly identical types into different varieties or combining them entirely. In the Late Classic, for example, R.E. Smith and Gifford (1966) identified 3 red-slipped types according to chronological placement (Tepeu 1, 2, or 3), while Adams (1971) identified 4 types that were divided into 8 varieties according to form and paste. Most contemporary studies (Foias 1996, Forsyth 1989, Laporte et al. 1992, Forné 2005) use one of R.E. Smith and Gifford's types to define the range of material identified by them and Adams, using others as varieties if need be. There is, however, no consensus on what the nomenclature should be, and units of different samples with the same attributes are classified in different ways according to the ceramicist.

### *The French School*

Investigations in the northern highlands follow a different system which is in many ways a synthesis of ware and type:variety. Becquelin and Baudez (2001 [1969]) overtly rejected the original proposal for the type:variety system, although the primary analytical unit was the type (this was actually the only analytical unit in most cases, although they did propose several potential groups encompassing several types).

The next major French project in Guatemala was La Lagunita (R. Viel 1984, Ichon and Arnauld 1985). The primary analytic unit was in this case the group, which was occasionally split into types and even varieties, although there was no system as to how this was undertaken. The Bedelio group, for example, was divided into two types

determined by the presence or absence of an underslip. One of the types was further divided into varieties based on the location of the primary slip. Incisions are present in part of the sample but not considered analytically relevant. The Nogaro group, on the other hand, is divided into two types (simple and incised), and the latter was divided into two varieties according to complexity of incised design.

Arnauld (1986) and Ichon (1992) both published ceramics monographs within a few years of each other focusing on closely-related samples. While Ichon maintained the system used at La Lagunita, Arnauld returned to having type as the dominant unit with any decoration beyond slip color simply noted (with a few exceptions). A few groups were proposed by Arnauld, although they were not groups as defined by American ceramicists, and are instead more closely related to the original ware concept. Arnauld also designated a higher level of classification to replace the type:variety ware, which she called *class*. This designation appears to have been simply the most overt defining characteristic for one or several types (e.g., Porous, Red, Hard, Polished Orange). Arnauld also used a detailed form classification, giving each major form type a letter, which was then broken down into several varieties. This appears to have been the most enduring innovation of the monograph, and has become a standard part of most French monographs since it was published (c.f. Ichon 1992, Forné 2005).

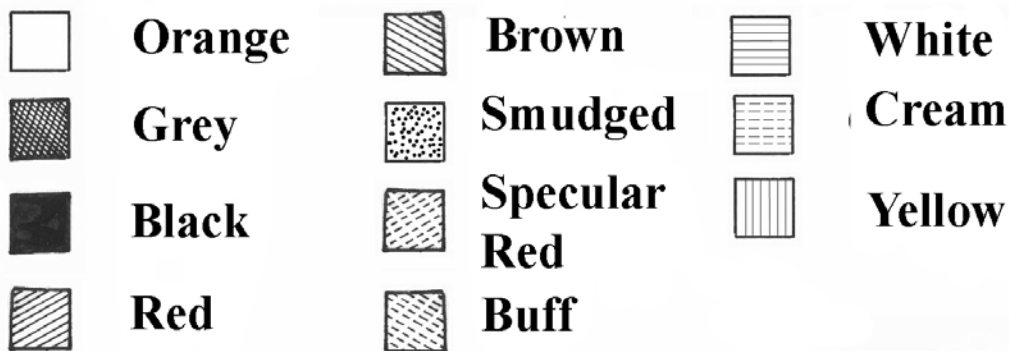
### **III. Methodology for the Present Study**

Because it is best-suited to examining inter-site associations and chronology, I have used the type-variety system as the basis of my analysis. Since much of the related material in the northern highlands was examined using the ware system or the French

school, however, I created a number of new type designations in my assemblage which are tied to specific material in other studies.

A total of 32,692 sherds and whole or partial vessels were analyzed by me or Monterroso, Spenard, and Burgos under my direction between November 2004 and September 2006. Up to 46 different attributes were analyzed for each sherd, group of sherds, or vessel. The analysis was undertaken on two levels at the same time—in each lot, sherds separated by type or variety, form, and vessel part, then weighed and counted. Rims, appendixes, and supports were treated individually. The typology was designed by Jeanette Castellanos to combine general and specific analyses into a single form.

### Color code for the ceramic drawings



**Figure 4- 1: Color code for the ceramic drawings**

The ceramics from a particular lot were first laid out on a tray and sorted according to type, variety, form, vessel part, and location of slip, although each rim was treated separately. If the sherds were heavily eroded, an attempt was made to classify them at least according to ware, form, or vessel part. All of the sherds in each pile were then counted and weighed, and then one “exemplar” sherd was then subjected to a more intense analysis. We measured wall thickness and, when appropriate, diameter, neck height, vessel height, and support height. The color of each slip and paste was classified

according to the Munsell Soil Chart (which most studies use), and temper, inclusions, nucleus, and discolorations were recorded. In the case of decorated pottery, the designs were classified into simple or complex geometric designs or a plethora of anthropomorphic, zoomorphic, or glyphic types. When possible, diagnostic sherds were then drawn by Monterroso, Burgos, or Güicho Luin (figure 4-1).

All of this data was then input into a database in SPSS (the Statistical Package for the Social Sciences), from which all of the following descriptions derive, which then provided for statistical summaries and correlations that provided the basis for all descriptions.

In addition, a small sample of Classic-period sherds were sampled by Erin Sears for inclusion in the Maya Fine Paste Project, helmed by Dr. Ron Bishop of the Smithsonian Institution.

#### **IV. A Note about Ware**

The concept of ware in the type:variety system is highly problematic, and several scholars (Culbert and Rands n.d., Bishop, pers. comm. 2006) have questioned its appropriateness in the type:variety system. All of the slipped, Classic period ceramics in the Central Petén, for example, are classified as a single ware (Culbert and Rands n.d.). The problem with ware is that it is a vestigial appendage from Vaillant's earlier system, one intended to deal with technological questions like paste and general surface treatment that are otherwise ignored or overshadowed in the rest of the system. Rice (1976) proposed a division of ware into two independent kinds of ware—surface ware and paste

ware, although I agree with Adams (1971), Culbert (n.d.), Rands (n.d.), and Bishop (pers. comm. 2006) that some of the differences in paste can be dealt with on a varietal level.

Fundamentally, I believe that ware is a useful concept for discussing broad regional or temporal patterns. The four primary ceramic attributes (surface treatment, form, paste, and decoration), when considered together (as a ware), allow the ceramicist to discuss general trends and changing traditions over time and space, and this is especially important in transitional zones like the Pasión-Verapaz region. Since highland wares have never been established within a type-variety framework, I have proposed several preliminary wares. They are described in Appendix B.

## **V. A Comparative Ceramic Chronology**

Since the material recovered from the region straddles the fault-lines between a variety of different ceramic traditions, table 4-1 (see following page) anchors the Pasión-Verapaz ceramic chronology to established traditions throughout the Maya highlands and southern and central lowlands.



Table 4- 1: Correlation of Ceramic Sequences at Selected Maya Sites

Correlation of Ceramic Sequences at Selected Maya Sites

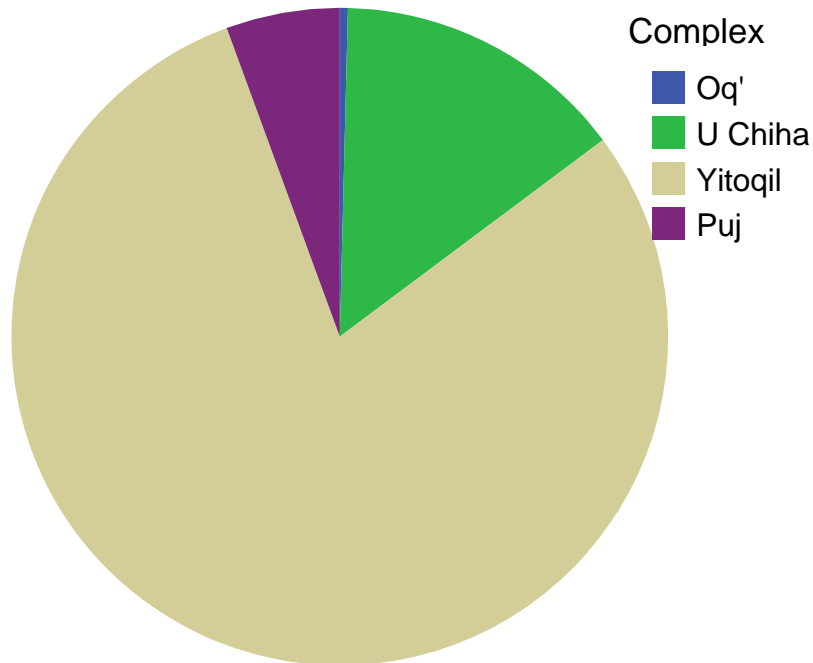
Historic Periods	Highlands						Pasión-Verapaz Region				Southern Petén				Central Petén		
	Alta Verapaz	Nebaj/Acúl	La Laguna	Salama Valley	Kaminaljuyu	Western El Salvador	Alta Verapaz	Verapaz	Region	Altar de Sacrificios	Selbal	Petexbatun	Dolores Valley	Tikal	Uaxactun		
1500																	
1400																	
1300																	
1200																	
1100																	
1000																	
900																	
800																	
700																	
600																	
500																	
400																	
300																	
200																	
100																	
A.D. 1																	
100																	
200																	
300																	
400																	
500																	
600																	
700																	
800																	
900																	
1000																	
1100																	
1200																	

## CHAPTER V:

### THE NATURE OF THE PRECLASSIC AT THE HIGHLAND- LOWLAND TRANSITION

#### I. Introduction

Shrine use in the Pasión-Verapaz zone begins rather humbly in the Preclassic. The earliest archaeological evidence dates to ca. 1000 B.C. and consists of two sherds, and even the Late Preclassic, to which most of the Preclassic assemblage dates, consists of only 402 sherds (figure 5-1).



**Figure 5- 1: Preclassic Sherd Count per Complex**

A total of 25 groups and 53 types and varieties were identified that date to between 1000 B.C. and A.D. 250, all of which are described below. The earliest material appears to be transitional, sharing characteristics with both the highlands to the south and

the lowlands to the north, while the later material is stylistically related to other parts of the southern Petén, particularly the Dolores Valley and the Lower Pasión.

The Preclassic is the least understood period in the history of this region, which is due to the relative paucity of recovered material, a problem that will hopefully be remedied in the coming years. All of the descriptions, comparisons, and patterns described in this section, then, should be considered with this in mind.

## **II. Oq' Complex (1000-800 B.C.)**

Settlements and artifacts dating to before the Late Middle Preclassic are very hard to find, and the region presently under study is no exception. Only one context contained material belonging to the Early Middle Preclassic, a long horizontal crack that could generously be referred to as a “rock shelter.” It is simply a fissure in a hill about 20 meters long and 2 meters deep with a ceiling that is, at its highest point, less than 2 meters tall. Called Shelter (CBA-1-14), it is located about 5 minutes outside of the ancient and modern village of La Caoba and appears to be a favorite rooting spot for pigs, dogs, and children, so any potential stratigraphy has been destroyed.

Because of the disturbed context and because of the mixing of material from disparate time periods (ceramics from the Early Middle Preclassic to the Terminal Classic were recovered there), a very conservative approach to the ceramic analysis was undertaken; only two sherds were ultimately catalogued as Early Middle Preclassic. While there was no question as to their dating, both sherds were still problematic because they shared characteristics of both Xe (southern lowland) and Xox (northern highland) material. Eventually they were categorized as lowland, since the paste and surface finish

were closer to Abelino group ceramics, although I gave a preliminary variety label to the first and described the second. Both of the sherds have quartz and sand temper and a smooth red slip, and one has horizontal chamfering.

## **Monochromes**

### ***Río Pasión Slipped Ware***

*Abelino Group* (2 sherds, 100% of the Oq' sample)

**Ware:** Río Pasión Slipped

**Complex:** Xe

**Sample:** 2 rim sherds, both of which were subject to further investigation



**Figure 5- 2: Abelino Group a) Abelino Red:Colax, b) Unnamed Champfered (photo by author)**

**Principal identifying modes:** 1) Dark red slip, 2) thick paste with quartz and sand temper, and 3) a tecomate form.

**Paste:** The paste is red (10R6/4) or reddish orange (2.5YR6/4) with a large quantity of quartz and sand mixed together to form the temper. The center of both of the sherds has a thick black nucleus.

**Slip:** A smooth, dark red (10R3/6 or 10R4/8) slip covers the exterior of the vessels and the interior lip of one vessel and the entire interior of the other.

**Form:** Both of the examples are thick-walled (9.5-9.7 mm) tecomates with an average diameter of 21 cm (18-24). The lip is either rounded and externally thickened or interiorly beveled.

**Type:variety Designation:** Two types were identified, one pre-established and the other established here.

Abelino Red:Colax (Adams 1971:20; the variety is established here)—1 sherd (figure 5-2 a)

Unnamed Chamfered—1 sherd (figure 5-2 b)

**Decoration:**

1) *Plain:* The primary reason to use a new variety designation here is because the sherd does not correspond exactly with other samples, instead appearing to be a synthesis of or transition between different transitions. They were thick-walled like contemporaneous highland vessels but the paste and slip are both more characteristic of the lowlands.

2) *Chamfered:* This sherd is identical to Abelino Red except for the addition of horizontal chamfers underneath the rim.

***Interregional comparisons:*** This sample shares features with ceramics in the north and south of the region, and in many respects appears to be a blending of the different areas. The slip is reminiscent of Abelino Red at Seibal (Sabloff 1975:48), where it is often a similarly dark shade of red—it is much lighter at Altar de Sacrificios (Adams 1971:20) and is normally specular red in the Sachaj group in the Verapaz (Sharer and Sedat 1987a:272). The paste, however, is closest to Altar de Sacrificios, where it is most commonly sand, and not the calcite typical of Seibal and the ash characteristic of the Verapaz region. The vessel walls are well outside of the range of lowland ceramics (5-7 mm at Altar) but does match with the Verapaz sample, which has an average thickness of about 9 mm.

The tecomate form, which defines the sample here, is rare at Altar de Sacrificios but common at Seibal and very prevalent in the Verapaz region. Tecomates are also common on the south coast, with a corresponding type called Payaque Zoned-Red (Green and Lowe 1967:104), although the slip still has specular flecks.

I have not been able to find any examples of chamfering in the Middle Preclassic, but the example in the present sample greatly resembles the contemporaneous Setok Fluted from Seibal (Sabloff 1975:48), which has horizontal fluting resulting in a similar effect to the chamfering here. Chamfering did become common in the Late Middle Preclassic throughout the Maya lowlands but normally on a flaring-walled bowl (see description for Juventud group ceramics below).

***Intraregional comparisons:*** Both of the examples of this group were found in caves in the San Francisco Hills that are about a kilometer away from each other.

### III. U Chiha Complex (800-300 B.C.)

Archaeological material from the Late Middle Preclassic is still very sparse, although the sample is larger and more spread out than the previous Oq' phase. A total of 72 sherds were recovered, mostly concentrated in caves in the San Francisco Hills (89%), although one sherd was recovered from the aguada in La Caoba Vieja, a settlement in the hill area. In addition, 8% of the sherds were recovered in the Candelaria Cave system and 1 in the stelae platform in Tres Islas.

It is presently unclear if the artifacts were deposited by a local or transient population—all but two sherds were found in caves, and those recovered from the surface were found in contexts that were almost certainly secondary. All of the contexts were heavily disturbed or mixed. Much more investigation is needed to determine the nature of the assemblage.

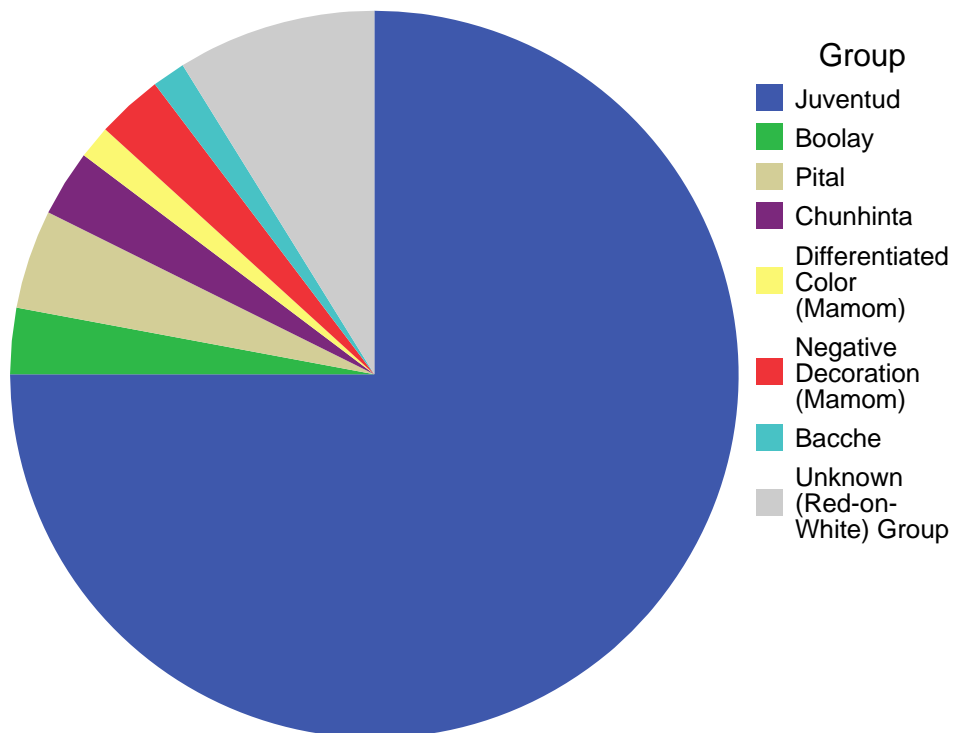
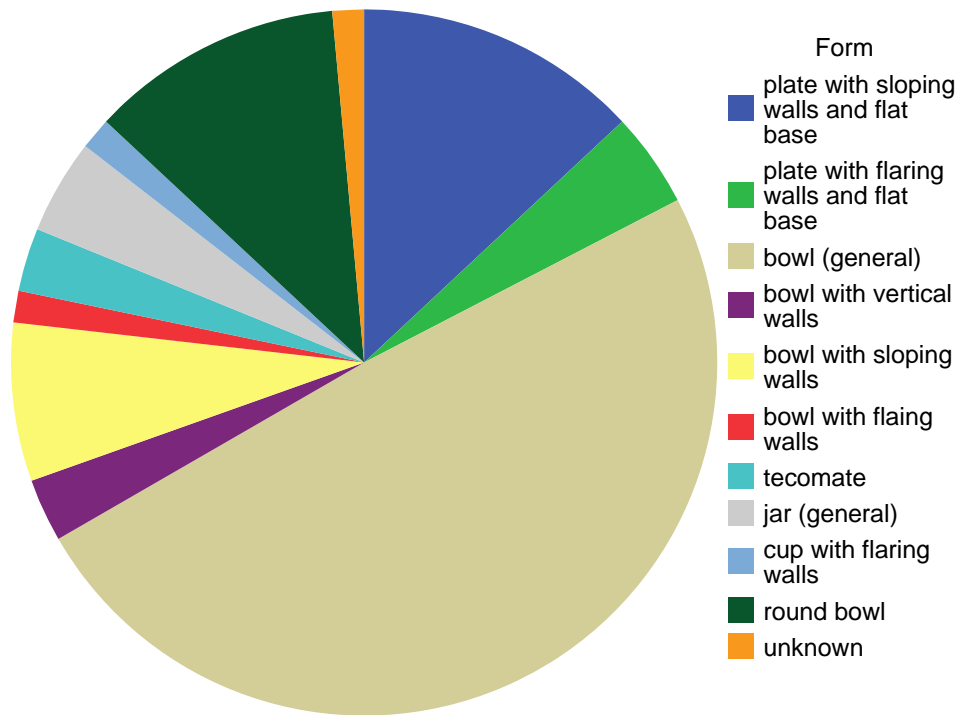


Figure 5- 3: U Chiha Groups by Sherd Count

The majority of the sample (93%) is lowland in nature, although it shares some of the same problems as the earlier phase, with a mixing of lowland and highland traits. The forms and wall thicknesses are closer to the highlands, while the slips, decorations, and paste are lowland. Eight ceramic groups were recovered (figure 5-3); with the exception of six sherds of an unidentified red-on-orange type, all belong to the Mamom ceramic sphere.



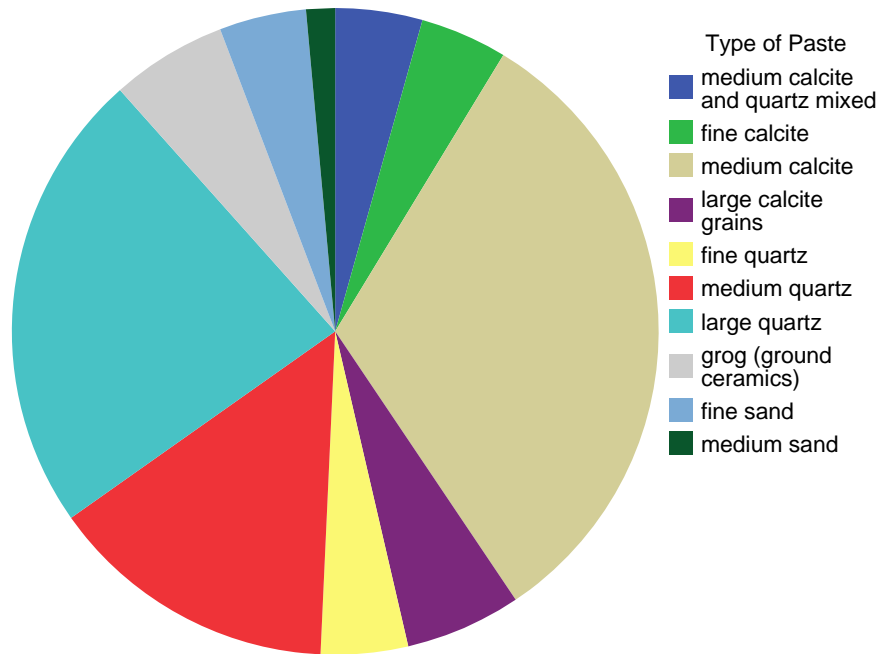
**Figure 5- 4: U Chiha Forms by Sherd Count**

The most common forms in the U Chiha sample (figure 5-4) are plates and bowls—an indeterminate plate or bowl form composes 51% of the sample, followed by straight-walled plates (13%), flaring-walled plates (4%), vertical-walled bowls (3%), flaring-walled bowls (1%), and rounded bowls (1%). Jars make up 4% of the sample and tecomates 3%, and 1% of the sample is indeterminate.

All of the sherds are slipped, and red is the dominant color, composing 77% of the sample. Cream is the second most common color (11%), followed by brown, black, and



orange (each with 3% of the sample), with one specular red and one cream and black dichrome sherd. Two-thirds of the sample is undecorated, but there is a relatively large variety of decorative modes present in the sample—incised (11%), chamfered (4%), fluted (4%), bichrome (8%), resist (3%), dichrome (1%), and resist-incised (1%).



**Figure 5- 5: U Chiha Pastes by Sherd Count**

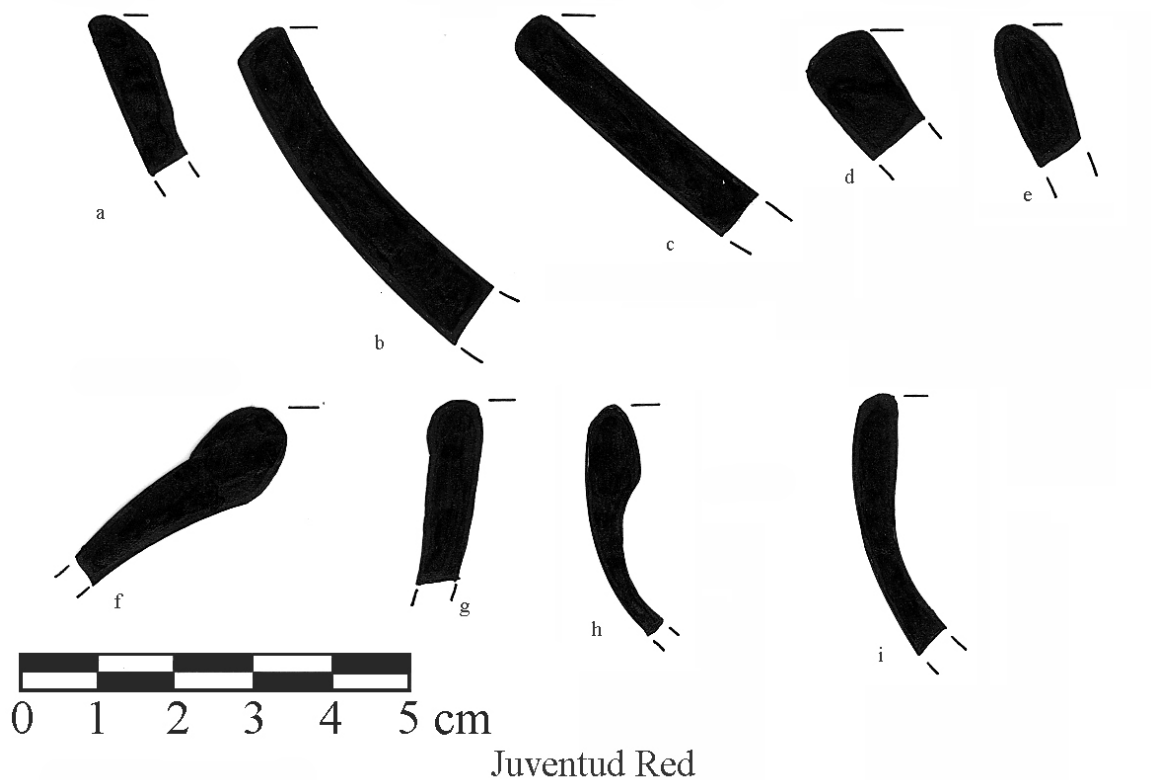
The paste (figure 5-5) is normally calcite (48%), although quartz (28%), sand (10%), grog (10%), and a mix of calcite and quartz (5%) are all used as well. Over half of the temper is medium-grained (51%), but large (30%) and fine (19%) grains are still common.

## Monochromes and Dichromes

### *Flores Waxy*

*Juventud Group* (77% of the U Chiha sample)

**Ware:** Flores Waxy



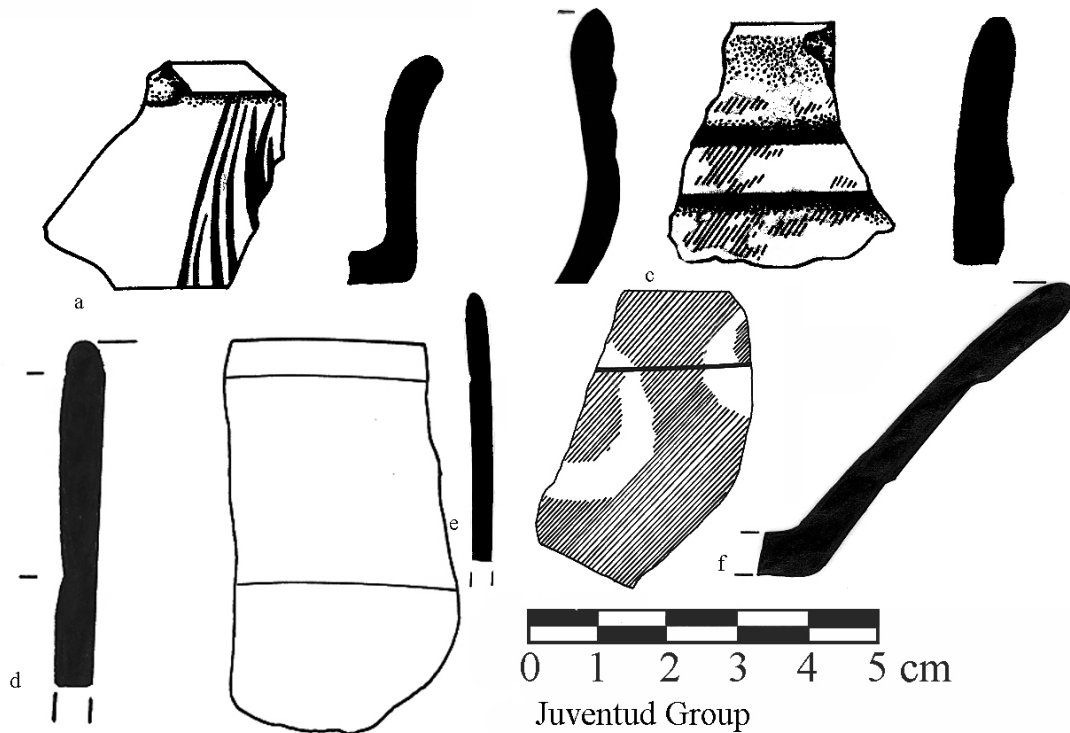
**Figure 5- 6: Juventud Group Ceramics, a-i: Juventud Red:Jul  
Complex: Mamom**

**Sample:** 51 sherds, 26 of which were subject to more detailed analysis. There were 33 body sherds, 13 rims, 1 neck, 1 base sherd, and 3 rim-to-base sherds.

**Principal identifying modes:** 1) Light or brownish red slip; 2) reddish paste with quartz or calcite temper; 3) a round bowl or a plate with inclined walls and a flat base, 4) often with an exterior or interior thickening in the rim.

**Paste:** The paste is reddish, ranging from 10R4/6 to 2.5YR6/4, although it is most commonly 10R5/6 or 6/6. The temper is normally medium calcite (31%) or quartz (19%), although it is occasionally grog (12%), fine (8%) or large (8%) calcite, large quartz (8%), fine (8%) or medium (4%) sand, or a mixture of medium quartz and calcite (4%). There are inclusions in 65% of the sample, and they are normally black (35%) or

red (4%) ferruginous lumps, mica (8%), quartz (8%), or a mixture of carbon and ferruginous lumps (4%). A nucleus is present in over half of the sample (62%), and it is normally thick.



**Figure 5- 7: Juventud Group, a) Guitarra Incised:Guitarra; b-c) Xexcay Fluted:Xexcay; d, f) Desvario Champfered:Desvario; e) Chechen Spotted-Incised:Chechen**  
**Slip:** A brownish or light red slip (most commonly 10R4/6, but ranging from 7.5R4/6 to 2.5YR5/8) was normally applied directly onto the smoothed surface of the vessel, although one example has a cream underslip. The slip often has “rootlet markings.” The majority of sherds were slipped on both the interior and exterior (71%), including 1 unslipped and 2 slipped bases. 25% of the sample was slipped only on the exterior and 4% only on the exterior.

**Forms:**

- 1) A general bowl or plate form (61%) with a wall thickness of 9.2 mm (6-11.5 mm).
- 2) A plate with sloping, everted walls and a flat base (13%). The lip is widely variant—pointed with a direct or exterior bolstered rim or rounded, squared, or with an interior or exterior bevel and a direct rim. The diameter is 26.6 cm (21 to 34 cm), the vessel wall is 9.6 mm (8.5-11.9 mm), and the plate is 6.5 cm tall (6.4-6.5).
- 3) A slightly-incurving bowl (10%) with a rounded or squared lip with a rim with an interior bolster and a diameter of 22.3 cm (17-26 cm). The wall thickness is 7.8 mm (4.5-9.6 mm).
- 4) A bowl with vertical walls (4%) and a rounded, direct lip. The diameter is 16 cm (15-17 cm), and the wall thickness is 11.5 mm (11.3-11.7 mm).
- 5) A general jar form (4%) with a wall thickness of 7.8 mm (6.3-9.2 mm).
- 6) A tecomate (2%) with a very incurved rim and a rounded lip with bolstering on the exterior of the rim. The diameter is 16 cm and the wall thickness is 16.4 mm.
- 7) A plate with flaring walls and a flat base (2%). The lip is pointed with an exterior bolster, the diameter is 24 cm, and the vessel is 4 cm tall. The wall thickness is 5.8 mm.
- 8) A bowl with flaring walls (2%) and a rounded lip. The diameter is 22 cm, and the wall thickness is 10.1 mm.
- 9) A cup with flaring walls (2%) and a rounded lip. The diameter is 10 cm, and the wall thickness is 5.5 mm.

**Type:variety Designation:** It is possible to divide this group into 5 different, pre-established types:

Juventud Red:Jul (Smith and Gifford 1966:158, the variety is established here)—37 sherds (figure 5-6 *a-i*)

Guitarra Incised:Guitarra (Smith and Gifford 1966:158)—6 sherds (figure 5-7 *a*)

Desvario Chamfered:Desvario (Smith and Gifford 1966:157)—3 sherds (figure 5-7 *d, f*)

Xexcay Fluted:Xexcay (Laporte pers. comm. 2006)—3 sherds (figure 5-7 *b-c*)

Chechen Spotted-Incised:Chechen (Laporte pers. comm. 2006)—1 sherd (figure 5-7 *e*)

**Decoration:**

1) *Plain* (46%): The undecorated sherds in this sample are bowls, plates, and tecomates. I have established a new variety here for these sherds because of the general thickness of the sample (averaging 10.8 mm), which is well outside of the range of the material from the Lower Pasión (Sabloff 1975:61) and barely within the reported range for related types in the Salamá Valley (Sharer and Sedat 1987:287).

2) *Incised* (23%): The incised sherds in this group are from rounded bowls, plates with flaring or sloping walls, and jars. The incisions are normally simple, linear, post-firing incisions, although one of the examples had incisions made before the vessel was slipped.

3) *Chamfered* (12%): Horizontal chamfering just below the rim continues from the Oq' sample, but is still to be relatively rare (3 sherds) and is limited to plates with inclined or flaring walls. The chamfering creates a noticeable zigzag in the sherd profile.

4) *Fluted* (12%): Three sherds, all from bowls, have horizontal fluting on the vessel exterior below the rim.

5) *Spotted-Incised* (4%): One sherd in the sample has resist decoration and a pre-firing incision. There is no consensus on how negative decoration was created, but it appears that the vessel was incised with a simple circumferential line, slipped a yellowish orange, and fired. A substance such as wax (Shook and Kidder 1952:100) was then dripped onto the vessel, creating simple, splotchy designs, and the rest of the surface was slipped an orangish red, resulting in a simple, blotchy design.

***Interregional comparisons:*** Juventud is a common group throughout the lowlands, and many of its modes are shared with others in the Maya highlands and in the Pacific slope and coast. In the southwestern Petén (Foias 1996:216-9, Sabloff 1965:63, Adams 1971:20), open plates or bowls are the most common form, although there are incurving bowls and tecomates present as in this sample. Lips are most commonly rounded (unlike in the Pasión-Verapaz region). The vessel walls are 4-12 mm thick in Seibal, slightly more restricted in Altar, and averaging 6.7 mm in the Petexbatun, thinner than the sample here.

The slip is a reddish orange to orange at the other sites, lighter than in the present sample. The temper is calcite in the Petexbatun and Seibal and, occasionally, in Altar de Sacrificios, where sand temper is more common. The present sample seems to fall well within the parameters set up by Sabloff for the Seibal collection in form, where only one example of a tecomate was found, although there were numerous examples of slightly-incurving bowls (Sabloff 1975:61).

In the Central Petén (R.E. Smith 1955:113, Culbert n.d., Forsyth 1989:13-15, Dominguez Carrasco 1994:23, Callaghan 2006:227), the forms tend to be plates or bowls with occasional tecomate or jar forms. The temper varies from ash at Holmul to calcite at Tikal, Calakmul, El Mirador, and, presumably, Uaxactun. The slip tends to be an orangish red or reddish orange. At Tikal, the orange-slipped sherds are classified as Ainil; outside of Tikal this type is either non-existent or lumped in with Juventud (which tends to have more of an orange color than during later time periods).

Further east (Gifford 1976:78), red-slipped wares from this time period were divided into a true red (Sampopero) and the orangish red typical of the central Petén (Juventud). Bowls are the most common form, normally with pointed lips. The paste is calcitic and the wall thickness ranges from 5-9 mm.

In the Salamá Valley (Sharer and Sedat 1987a:287), Xinacati shares many of the same forms and are commonly bowls or, less commonly, jars. The vessel walls average about 8 mm thick, and the paste is reddish with volcanic temper. The surface is a very dark, deep red and, like lowland types, does not have specular flecks.

Incisions in the present sample tend to be fine, which matches other sites in the lowlands with the exception of Altar de Sacrificios, where they are broader (Foias 1996:223). In the highlands, the most similar identified type is Chelac Grooved-Incised:Chelac, which has pre-slip grooving and occasionally overlapping post-firing incisions. Chamfering is rare at most sites in the lowlands (Foias 1996:226) and non-existent in the highlands.

Fluting in the Late Middle Preclassic is rare, but almost exclusively found in the southern Petén (Laporte, pers. comm. 2006; Foias 1996:227). Some examples of

Juventud group ceramics with fluting are present in the Mirador Basin (Forsyth 1989:16, 1993). All of the examples in this sample are from bowl forms; however, they are short-necked jars in the Petexbatun (Foias 1996:227).

Resist is a common decorative technique in the highlands but never became popular in the lowlands. Resist in the Juventud group has only been identified in the present sample and in the southeastern Petén (Laporte, pers. comm. 2006).

***Intraregional comparisons:*** With the exception of a single sherd from Tres Islas, all of the sherds in this group were found in caves in the San Francisco Hills.

*Boolay Group* (3% of the U Chiha sample)

***Ware:*** Flores Waxy

***Complex:*** Mamom

***Sample:*** 1 rim sherd and 1 rim-to-base sherd, both of which were subject to further analysis.

***Principal identifying modes:*** 1) A mottled tan slip; 2) light orange paste with fine calcite temper and organic inclusions; 3) a plate form or jar with a flaring neck.

***Paste:*** The paste is either a light orange (5YR5/6) with a fine calcite temper, organic inclusions, and a thick black nucleus or a dark red (10R4/6) with grog temper and a dark interior half in the sherd profile.

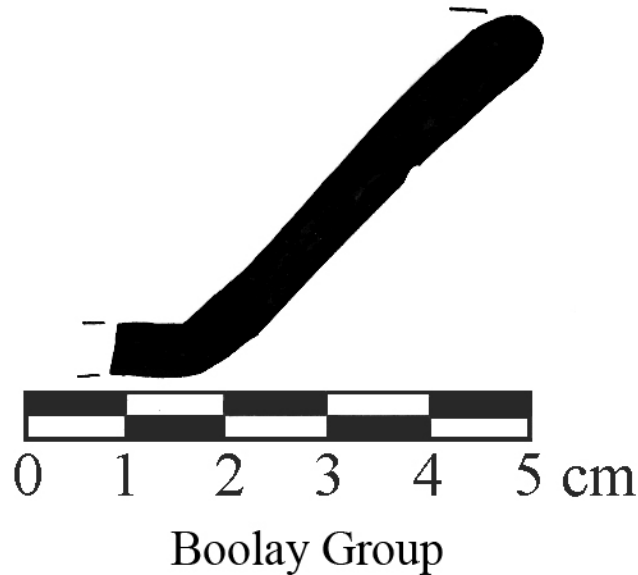
***Slip:*** A mottled tan slip (2.5YR4/6), which in one case is over a cream underslip. Both the interior and exterior are slipped.

***Forms:***

- 1) A jar with a flaring neck with a rounded lip and a wall thickness of 9.1 mm.



2) A plate with sloping walls, a rounded lip, and a flat base. It has a 34 cm diameter, stands 6.1 cm tall, and has a wall thickness of 16.2 mm.



**Figure 5- 8: Boolay Group, Bech Incised:Bech**

**Type:Variety Designations:** Each of the two sherds in this group corresponds to a different, pre-established type.

Boolay Brown:Boolay—1 sherd (Culbert n.d.)

Bech Incised:Bech (Culbert n.d.)—1 sherd (figure 5-8)

***Decoration:***

1) *Plain:* The undecorated sherd formed part of a jar with a flaring neck.

2) *Incised:* The decoration consists of simple post-firing incisions on the exterior of the plate.

***Interregional comparisons:*** This group has an apparently restricted distribution, although it is possible that any Boolay sherds were simply subsumed into Juventud Red. The group has been reported in the southeastern Petén and at Tikal (Culbert n.d.), where it is of variable temper and of a much lighter tan than is present here (on the 7.5 and

10YR pages). The vessels are most commonly flaring dishes, although jars, tecomates, and other dish forms are also present.

In the highlands, a dark brown to black slip is present in the Salamá Valley (Sharer and Sedat 1987a:294), Kaminaljuyu (Wetherington 1978:55-65), Santa Leticia (Demarest 1989:59), and Chalchuapa (Sharer 1978:36-38), where it is typed as various varieties of Pinos Black-Brown and appears towards the end of the Middle Preclassic and continues through the Late Preclassic (it is described in further detail in the discussion of Polvero ceramics below).

Incised vessels in this group are rare, having only been identified here, at Tikal, and in the southeastern Petén. Darker, coarse-incised equivalents have been found throughout the highlands, most notably Jorgia Course-Incised (Sharer and Sedat 1987a:295-6, Sharer 1978, vol. 3:37) in Salamá and Chalchuapa, and Verbena Coarse Incised in Kaminalhuyu (Wetherington 1978:62).

***Intraregional comparisons:*** Both of these sherds come from different caves in the San Francisco Hills.

*Pital Group* (5% of the U Chiha sample)

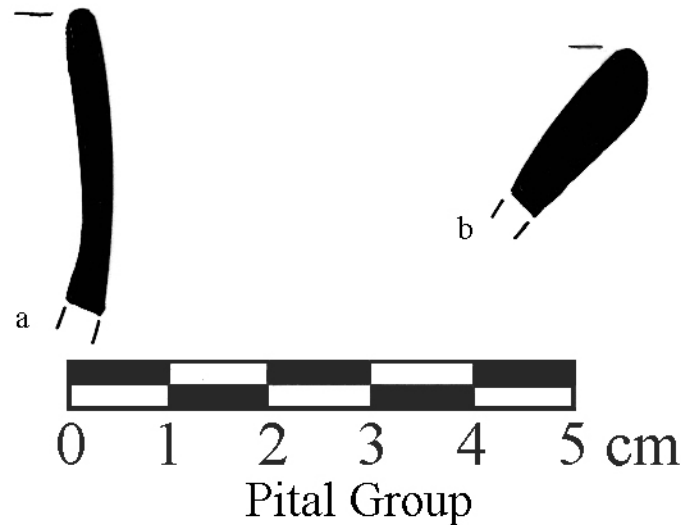
***Ware:*** Flores Waxy

***Complex:*** Mamom

***Sample:*** 3 rim sherds, 2 of which were subject to further analysis.

***Principal identifying modes:*** 1) A cream, waxy slip; 2) a light orange paste with calcite temper; and 3) a plate or bowl form.

**Paste:** The paste is a light red (10R6/6) to orange (5YR7/6) with temper made from medium calcite, large quartz, or a mixture of calcite and quartz particles. There are occasionally ferruginous lumps, and two of the three sherds have a thick, dark nucleus.



**Figure 5- 9: Pital Group, a-b) Muxanal Red-on-Cream:Muxanal**

**Slip:** The cream slip (2.5YR8/3) is thick and waxy and, in each case, was placed directly into the smoothed surface. Two of the sherds were slipped on both the interior and exterior, while the third was only slipped on the exterior.

**Forms:**

1) A plate with flaring walls, a rounded lip, a 38 cm diameter, and a wall thickness of 16.2 mm.

2) A rounded bowl with slightly interior-curving rims and rounded lips. One example is thickened in the interior of the rim. The average diameter is 26 cm (24-28 cm), and the wall thickness is 8.8 mm (8.7-8.8 mm).

**Type:Variety Designation:** The sherds in the Pital sample can be classified as two different types originally established by R.E. Smith and Gifford (1966:160) at Uaxactun:

Paso Danto Incised:Paso Danto (R.E. Smith and Gifford 1966:160)—1 sherd

Muxanal Red-on-Cream:Muxanal (R.E. Smith and Gifford 1966:160)—2 sherds  
(figure 5-9 a-b)

***Decoration:***

1) *Incised:* One sherd in the collection belongs to a plate with a simple design created by fine, post-firing incisions.

2) *Red-on-Cream:* Although standard examples of Muxanal are simple dichromes with a solid red interior or exterior, the other two sherds in this group are decorated with a red stripe on the vessel rim. However, since the sherds are otherwise similar to the norm, however, I have preliminarily classified them as Muxanal, although I have given them a new variety designation—Xab'. They are different enough from the Unnamed Red-on-Cream (see below) and sufficiently lowland to warrant putting them into this group.

***Interregional comparisons:*** This group is widespread throughout the Maya lowlands, and incised examples are found in the Petexbatun (Foias 1996:238-40), at Seibal (Sabloff 1975:67), and in the central Petén (R.E. Smith 1955, Forsyth 1989:19, Forsyth 1983). The most common form is a flaring-walled bowl; however, rounded or incurving bowls and jars are also present. The rims are most commonly rounded, and the paste is pink to brown, normally with calcite temper. While plain sherds from this group were found at Altar de Sacrificios (Adams 1971), Paso Danto Incised was not identified.

In Belize (Gifford 1976:81), Paso Danto is a common type, and is normally a bowl with a wall thickness of between 4 and 10 mm thick. The paste is normally ash, although quartz temper is present. Here the incisions are pre-slipping. No cream-slipped, incised types have been reported from the highlands.

As has been mentioned, this sample of Muxanal Red-on-Cream differs from the standard variety, found in small quantities in the central Petén, in the way the secondary red slip was used. In the southwestern Petén, the largest sample comes from the Petexbatun (Foias 1996:244-6), where the paste is a pink or reddish brown with calcite temper. There is little variation in paste, form, or decoration between the southwestern and central Petén (Forsyth 1989:18, Callaghan 2006:230). All of the examples are bowl or plate forms.

A similar red-on-cream type has also been found in the Petexbatun, Unnamed Red-on-Cream Incised (Foias 1996:248-50), which has a similar form, a carbonate paste temper, and red slip often on and near the lip. The major difference, of course, is the presence of incisions on the type in the Petexbatun, which is not present here.

At the site of Los Encuentros, a similar ware was identified by Hatch (1980:134-6), Red-on-White, which has quartz and mica in the temper and a white paste (identical to much of the surface color). The vessels are vertical-walled or round bowls or, occasionally, jars. The surface is smoothed and the same color as the paste with a red lip.

Guaymango Red-on-Buff is a superficially related type found in many parts of the highlands—in the Salamá Valley (Sharer and Sedat 1987a:283-4), Chalchuapa (Sharer 1978 vol. 3:27-28), Santa Leticia (Demarest 1986:117-24), and at Kaminaljuyu (Sharer and Sedat 1987a:284). It is a bichrome jar with a primary buff slip and a red secondary slip on the interior of the neck and at the neck-body juncture. Probable examples of Guaymango have been found at Monte Alto (Monte Alto Red-on-Buff, Shook and Hatch 1978:33) and other sites near the Valley of Guatemala (Sacatepequez Polished Red on Unpolished Buff, Shook and Hatch 1978:30-2). At Copan, Bozo Incised (Willey,

Leventhal, *et al.* 1994:15) is a more related type, although it is slightly later (Late Preclassic) and has curvilinear incisions. The primary slip is cream or white and, like the present sample, the lips are red, and the forms are primarily deep bowls.

*Chunhinta Group* (3% of the U Chiha sample)

**Ware:** Flores Waxy

**Complex:** Mamom

**Sample:** 1 rim and 1 body sherd, both of which were subject to further analysis.

**Principal identifying modes:** 1) Thick, waxy black slip; 2) tecomate or bowl form; 3) light orange paste with calcite temper.

**Paste:** Medium or large calcite grains were used for temper. The paste is orangish (2.5YR6/4). One example has pumice inclusions.

**Slip:** A waxy thick black slip that has somewhat “crinkled,” although that could be a result of post-depositional processes. One of the sherds is slipped only on the exterior, and the other on both sides; one sherd has a cream underslip.

**Forms:**

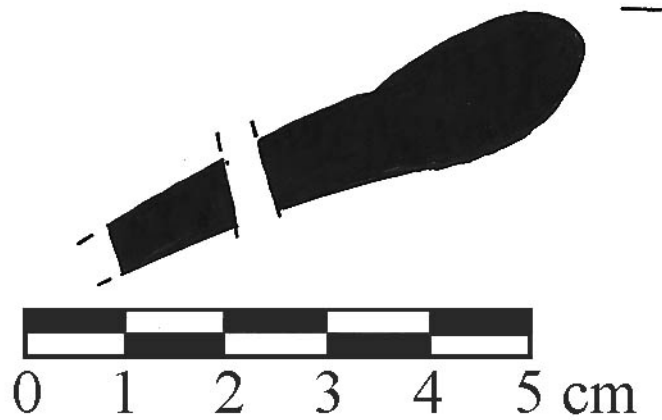
1) A tecomate with a rounded lip and an incurving neck. The diameter is 14 cm, and the wall thickness is 8.7 mm.

2) A general bowl or plate form. The wall thickness is 8 mm.

**Type:variety Designation:** Both of the sherds in this group belong to the same pre-established type and variety:

Chunhinta Black:Chunhinta (R.E. Smith and Gifford 1960:156)—2 sherds (figure 5-10)

**Decoration:** Both of the sherds are undecorated.



Chunhinta Group

**Figure 5- 10: Chunhinta Group, Chunhinta Black:Chunhinta (notice the mend-hole near the rim)**  
**Interregional comparisons:** Like the Abelino and Juventud group ceramics, these sherds exhibit both highland and lowland modes—the tecomate form is rare in the lowlands and the walls are normally thinner, but the paste and temper are closer to lowland norms. This type appears throughout the Maya lowlands. In the southeastern Petén (Foiias 1996:250-2, Sabloff 1975:69, Adams 1971:24), there is little variability, and, apart from the vessel thickness (which is about a millimeter thinner than here), is identical to this sample with the exception of sand temper at Altar de Sacrificios. In the central Petén (Forsyth 1989:16-8, Culbert n.d., Callaghan 2006:228), there is more variation—the paste is volcanic at Holmul, while calcite is used in the other regions.

At Barton Ramie (Gifford 1976:82-3), ash temper dominates the paste, the vessel walls average 7-8 cm, and all of the vessels are bowls or plates. The tecomate form is more restricted in the lowlands than bowls or plates, appearing only at El Mirador, Seibal, and Altar de Sacrificios.

In the northern highlands, the surface treatment and wall thickness are similar for Chimacho Black:Chimacho (Sharer and Sedat 1987a:284-5), but the forms are different, and the temper is normally ash. Pinos, described in the discussion of Boolay above, overlaps with Chunhinta and, at times, has a black slip.

***Intraregional comparisons:*** One sherd in the north aguada of La Caoba Vieja and a single sherd in a horizontal crack in a hill outside of the settlement (CBA-1-14).

***Observation:*** A “mend hole” was drilled near the rim of the tecomate.

*Differentiated Color Group* (2% of the U Chiha sample)

***Group:*** Differentiated Color

***Ware:*** Flores Waxy

***Complex:*** Mamom

***Sample:*** 1 body sherd

***Principal identifying modes:*** 1) A bowl with 2) a black exterior and cream exterior, 3) a light orange paste with coarse calcite temper.

***Paste:*** The paste is a light orange (5YR7/6) with a large-grained calcite temper.

***Slip:*** The sherd is slipped black on the outside and a light cream (2.5YR8/3) on the inside. Unlike later bichromes with a cream-slipped interior, however, there is no cream underslip on the exterior portion of the vessel.

***Form:*** A general bowl form with a wall thickness of 8.2 mm.

***Type:variety Designation:*** This sherd has been classified as the standard variety of Pánfilo Dichrome, a type established by Laporte (pers. comm. 2006) in the southeastern Petén.



**Decoration:** Aside from the zoned slips described above, this sherd is undecorated.

**Interregional comparisons:** This group is limited to the present region and the southeastern Petén (Laporte, pers. comm. 2006).

**Intraregional comparisons:** This sherd was found in a small cave in the San Francisco Hills.

*Negative Decoration Group* (3% of the U Chiha sample)

**Ware:** Flores Waxy

**Complex:** Mamom

**Sample:** 2 rim sherds, both of which were subject to further analysis.

**Principal identifying modes:** 1) Light orange slip with 2) small, discolored “blotches” done in resist; 3) very fine paste with quartz or sand temper; 4) inclined or flaring-walled plates.

**Paste:** The paste is finer than for most of the vessels of the time, with either fine quartz or sand temper, the latter with ferruginous lumps. The color varies between the two sherds, between a light red (10R5/6) and a reddish orange (2.5YR6/4).

**Slip:** A cream underslip is visible through small, irregular blotches in the orange slip (2.5 YR 4/6 or 5/8). One sherd is slipped on both the interior and exterior, while the other is only slipped on the exterior.

**Forms:**

1) A plate with sloping walls and a square rim with a 30 cm diameter and a wall thickness of 9.2 mm.

2) A plate with flaring walls, a rounded lip, a 30 cm diameter, and a wall thickness of 5.1 mm.

**Type:variety Designation:** The examples of this group are all belonging to the same, pre-established type and variety.

Tierra Mojada Resist:Tierra Mojada (Sabloff 1975:71)

**Decoration:** The decoration is limited to resist.

**Interregional comparisons:** This type is present in areas throughout the southern and central lowlands. It appears in the Petexbatun (Foias 1996:228-30) and Seibal (Sabloff 1975:71-2), where the surface treatment and form match the present sample but the temper is calcite. Foias (ibid) also identified Tierra Mojada sherds in the collections from Uaxactun and Altar de Sacrificios that were originally classified as Juventud. Forné (2005:384-5) identified it in the La Joyanca sample as well. Culbert (n.d.) identified a related type at Tikal, Ahchab Red-on-Buffer, which Foias (1996:230) noted has the same characteristics as Tierra Mojada Resist.

**Intraregional comparisons:** The apparent distribution of this group is restricted to two caves in the San Francisco Hills area, although they are found in disparate parts of the area—one in the center and the other on the eastern extreme.

### ***Cahabon Flakey Ware***

*Bacche Group* (1 sherd, 2% of the U Chiha sample)

**Ware:** Cahabon Flakey

**Complex:** Pre-Carcha

**Principal identifying modes:** 1) A thick, specular red slip, 2) an orangish red paste with calcite temper, and 3) a round bowl form.

**Sample:** One body sherd was identified.

**Paste:** The paste is an orangish red (10R5/6) with medium calcite temper and a thin dark nucleus.

**Slip:** A very dark specular red (7.5R3/6) has been painted on the interior of the vessel, while the outside has been smoothed.

**Form:** A slightly incurving round bowl with an exterior bevel and a diameter of 11 cm and a wall thickness of 7.4 mm.

**Type: Variety Designation:** This sherd has been preliminarily classified as a pre-existing type from Alta Verapaz.

Bacche Simple (Arnauld 1986:317)

**Decoration:** Plain

**Interregional comparisons:** A specular red slip is common throughout the highlands (Sharer and Sedat 1987a) and the south coast (M. Coe 1961:51-2).

**Intraregional comparisons:** This type was restricted to one cave in the San Francisco Hills.

**Observation:** No direct comparison has been possible between the Verapaz material and the present sample, so the designation is preliminary.

### **Unidentified Ware**

**Unidentified Group** (4 sherds, 6% of the U Chiha sample)

**Ware:** Unknown



**Figure 5- 11: Unknown Group, a-f) Unknown Red-on-Cream (photo by author)**

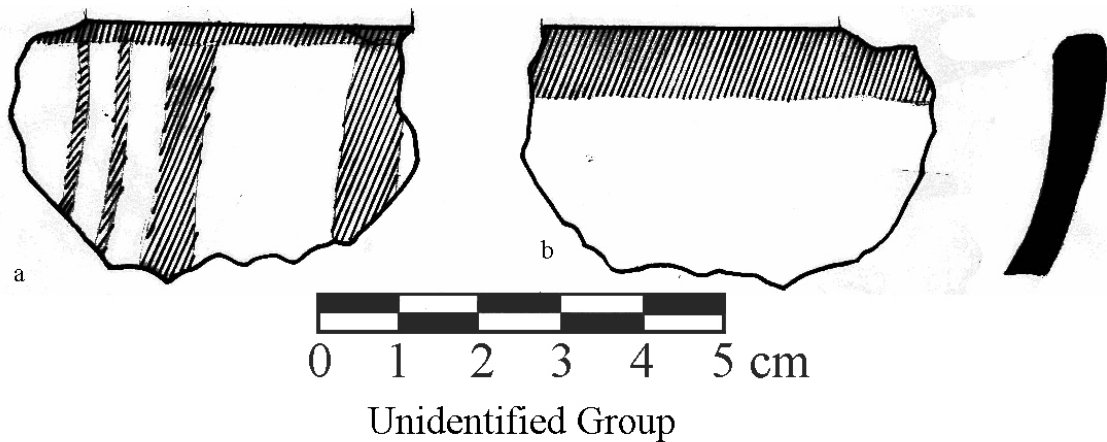
**Complex:** Unknown highland

**Sample:** 2 body sherds and 2 rim sherds were identified, and one of each was subject to further analysis.

**Principal identifying modes:** 1) A waxy, cream slip with 2) simple designs painted in red; 3) a reddish paste with quartz or calcite temper; 4) a shallow bowl form.

**Paste:** The reddish paste (10R6/8 or 5/2) has a quartz or calcite temper with a fine-to-medium grade and either stone or ferruginous inclusions. All of the sherds have a thick black nucleus, one with a paste that has been completely reduced to black.

**Slip:** The cream slip has a slight yellowish tint (7.5YR7/3 or 7/4). It is found on both the interior and the exterior of the vessel.



**Figure 5- 12: Unknown Group, a-b) Unnamed Red-on-Cream**

**Form:** A shallow bowl with incurving or out-sloping walls and a 21 cm diameter (20-22 cm). Of the three rims, one is squared, one is pointed, and one is rounded. The wall thickness is 6.9 mm (6.8-6.9 mm).

**Type:variety Designation:** No extant groups or types seem to correlate with this sample (figure 5-11 a-f, 5-12 a-b).

**Decoration:** Over the primary slip, a red band has been painted on the rim. Several red lines, which in some cases almost resemble the much later “trickle wares” of Yucatan, are painted in the interior of the vessels.

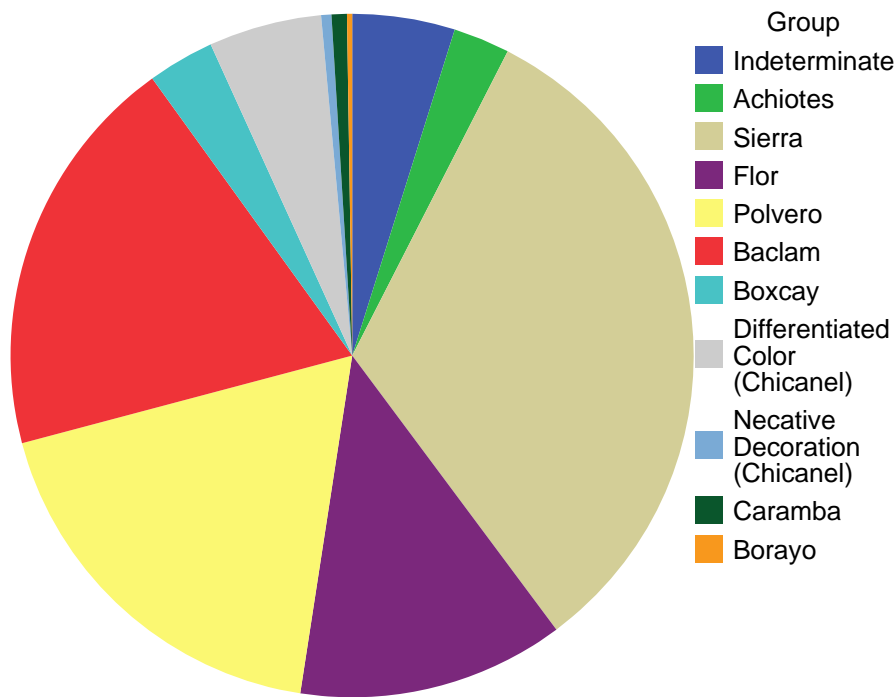
**Interregional comparisons:** See the discussion of Pital for a description of other red and cream types in the region. The major difference between this sample and others from the Late Middle Preclassic is the complexity of the design—most contemporaneous vessels simply had zones of red on a cream background.

I have been unable to find a direct match with this type in any monograph or collection, although I have obtained independent confirmation from Laporte, Foias, Arroyo, Forsyth, Hatch, and Demarest that they are highland. Jeff Braswell believes that they are related to ceramics from San Martin Jilotepeque (pers. comm. 2006).

*Intraregional comparisons:* These sherds were found in caves in the San Francisco Hills.

#### IV. Yitoqil Complex (300 B.C.-A.D. 250)

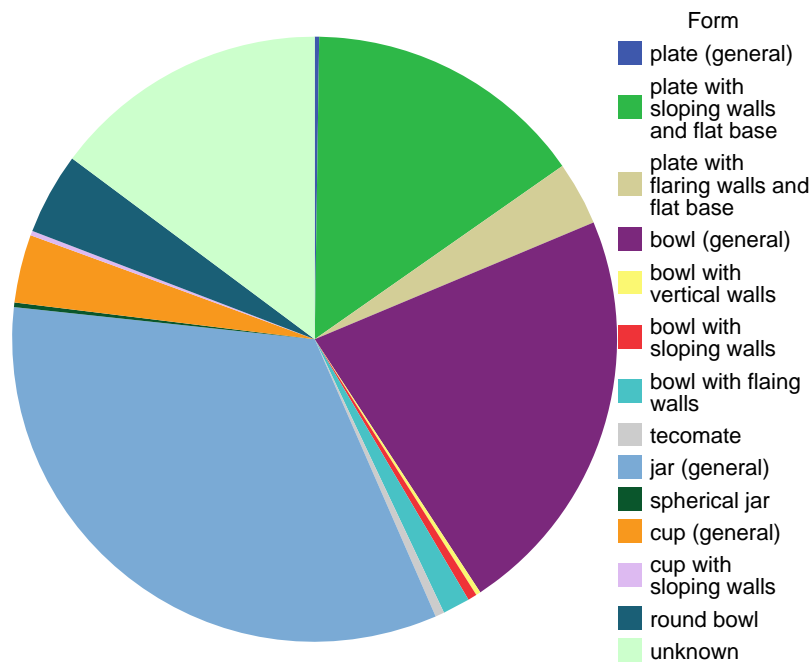
The Late Preclassic is the most lowland of all of the time periods represented in the sample, with over 99% of the collection belonging to groups common to the central or southern lowlands and only 1 sherd that appears to be from Alta Verapaz (figure 5-13). The sample is over four times the size of the preceding periods and is derived from contexts throughout the northern  $\frac{3}{4}$  of the region under study.



**Figure 5- 13: Yitoqil Groups by Sherd Count**

The same problems exist in this time period as in previous one—all of the contexts are mixed, and since most are in caves or other ritual contexts, no Yitoqil sites have been identified as of yet. Another major concern with the sample is the “Peripheral

Chicanel” issue described by Laporte (1995b)—many of the Late Preclassic types and groups continue through the Early Classic. While I have tried to separate these two phases, the distinctions are still somewhat unclear and some mixing has certainly occurred.

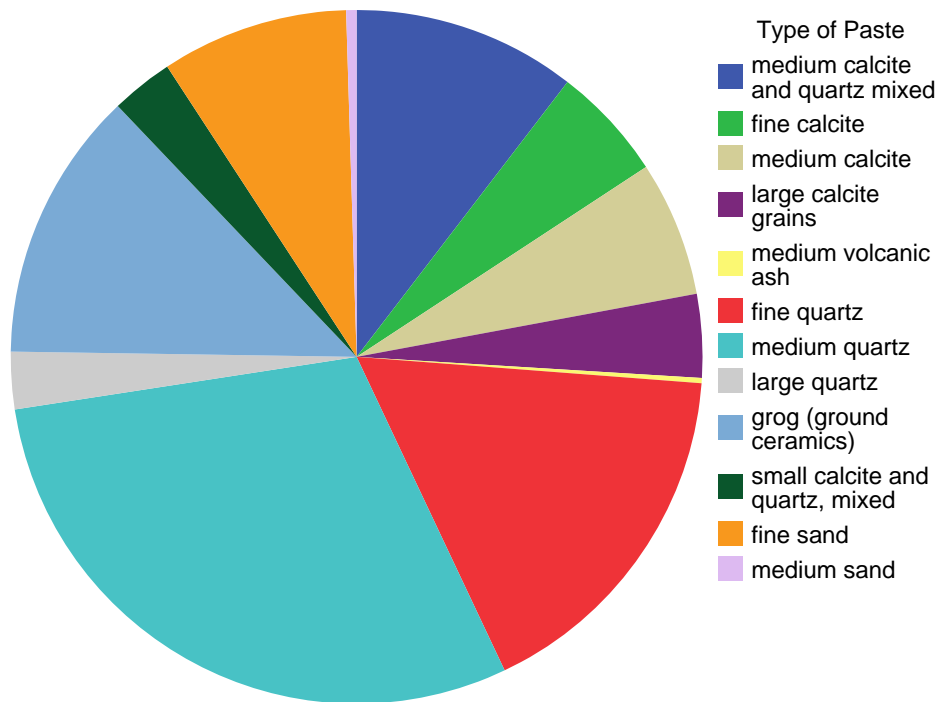


**Figure 5- 14: Yitoqil Forms by Sherd Count**

Keeping these limitations and problems in mind, it is possible to make some general statements about the sample. The most common vessel form (figure 5-14) is a jar (33%), but plates are also common, with either inclined (15%) or flaring (3%) walls. Bowls are much rarer, with 1% of the population being a bowl with a flaring wall and less than 1% with vertical or inclined walls. 22% of the sample is a general plate or bowl. Cups and tecomates are also occasionally present. 15% of the sample is of indeterminate form, and one of the sherds is part of a miniature vessel.

There is less standardization in slip color than in previous periods—only 34% of the sherds have a red slip, followed by orange (21%), black (19%), cream (13%), and

brown (4%). In addition, 6% is dichrome of various colors, and 3% is unslipped. This sample is normally undecorated—only 16% of the sherds have any sort of decoration, but there is a fairly wide variety of modes. The most common decorations are incised (7%), dichrome (4%), and striated (2%); dichrome-incised and resist-incised each make up 1% of the sample. There is one example each of punctated and fluted decoration.



**Figure 5- 15: Yitoqil Pastes by Sherd Count**

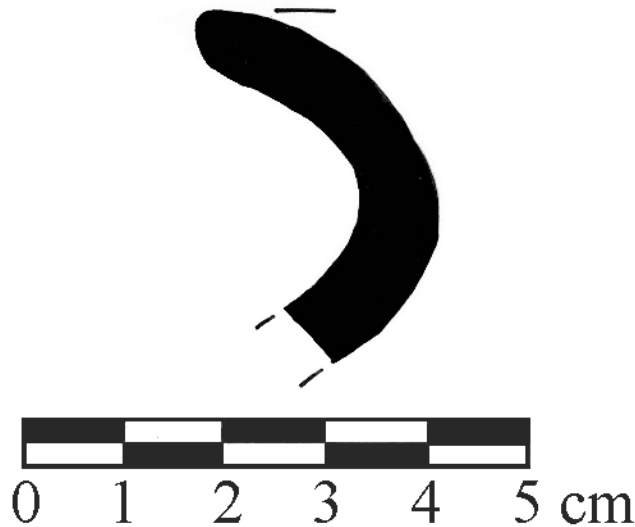
The paste (figure 5-15) is most commonly quartz (45%), but calcite (17%), grog (16%), a mixture of calcite and quartz (12%), and sand (9%) are also present, with only 1% having ash temper. As in the previous period, tempers are most commonly medium-grained (43%), although fine (35%) and large (22%) grains are also present.

## Unslipped

### *Uaxactun Unslipped*

*Achiotes Group* (3% of the Yitoqil sample)





**Figure 5- 16: Achiotes Group, Achiotes Unslipped:Achiotes**

**Ware:** Uaxactun Unslipped

**Complex:** Chicanel

**Sample:** 11 sherds, 6 of which were subject to further analysis. Of this sample, 8 are body sherds, 2 are rims, and 1 is a neck sherd.

**Principal identifying modes:** 1) Unslipped, fire-clouded surface; 2) a jar with a short, flaring neck; 3) calcite or quartz temper.

**Paste:** The paste is a light orange (5YR7/6) to orangish red (10R5/6) with a temper made from medium calcite particles, fine to medium quartz, or a mixture of calcite and quartz. There is occasionally a thick dark nucleus and occasionally ferruginous inclusions.

**Surface:** Some splotches from uneven cooking on the exterior.

**Form:** Short-necked jar with a continuous curve from the body to the narrowest part of the neck, at which point it flares out again. The lip is rounded, and the vessel has an average diameter of 25.6 cm (22-29 cm). The height of the neck is 4.6 cm, and the wall thickness is 7.8 mm (4.8-10.8 mm).

**Type:variety Designation:** Sherds in this group belong to two pre-established types:

Achiotes Unslipped (R.E. Smith and Gifford 1960:160)—3 sherds (figure 5-16)

Zapote Striated (R.E. Smith and Gifford 1960:162)—8 sherds

***Decoration:***

1) *Plain* (27%): Achiotes Unslipped was originally established as a Mamom type at Uaxactun (R.E. Smith and Gifford 1966:154), although Culbert (n.d.) and Adams (1971:18) later extended it into Chicanel, replacing Paila Unslipped after noting that there were no real modal differences between them.

2) *Striated* (73%): The jars are identical to Achiotes Unslipped with the addition of short, deep, and rough striations on the exterior of the vessel below the shoulder. The striations are shorter and somewhat deeper than Early Classic Triunfo Striated, but both Zapote and Triunfo share the less-ordered nature of the striations relative to the Late Classic Encanto.

***Interregional comparisons:*** This group exists throughout the lowlands, and the present sample is most closely related to the Petexbatun (Foias 1996:271-5), where jars are common. While Seibal (Sabloff 1975:46) has similar forms, only Zapote Striated has been identified. The group is non-existent at Altar de Sacrificios, although a related type consisting of simple bowls, Morfin Unslipped, is found there (Adams 1971:18). The paste is normally carbonate, but sand temper dominates at Altar, and one sherd with quartz temper was found in the Petexbatun. The wall thickness is variable—while it averages just over 9 mm in the Petexbatun and 8 mm at Altar (both of which are approximately the same as in the present sample), at Seibal it is only 6 mm thick. Rims in the Petexbatun are most frequently rounded, the mean diameter is 22 cm, the neck height is 4 cm.

In the Dolores Valley (Laporte *et al.* 1993:65), plates, cups, and comales make up nearly 50% of the sample, but jars are still the most common form. In the central Petén (Culbert, n.d., Forsyth 1989:19, R.E. Smith 1955:118, Forné 2005:480), the paste is variable in color, and normally has a carbonate paste. Jars are the dominant form, and in Uaxactun, which is the only report with a full description of the type, the diameter is similar (20.9 cm mean) but the necks are shorter (2.9 cm). Many of the lips are still rounded, but pointed lips are more common than in the southwestern Petén. At Barton Ramie (Gifford 1975:108-10), Achiotes Unslipped was identified as Paila Unslipped and was divided into several varieties, normally with a calcite paste and often with a jar form.

In Salinas de los Nueve Cerros, two Late Preclassic types were identified—Isimbil Unslipped (Dillon 1979:47-8) and Xatzap Unslipped (Ibid. 46-7). The former has exclusively plate forms, while the latter is often a jar, although it is more of a “mushroom” form than the standard lowland wares. Paste is widely variant, with sand, tuff, and mica temper; and Xatzap Unslipped normally has a red wash in the interior. Zapote Striated also appears at Yaxchilan (López Varela 1989:80), where it has striations that often go up to the lip. Numsieb Striated is a type identified at Salinas de los Nueve Cerros (Dillon 1979:56-8), which is widely variable in form and modes. Regardless, they are often jars with a smoothed interior and a striated exterior up to the beginning of the neck.

Unslipped types have not been identified in the northern highlands during this time period.

***Intraregional comparisons:*** Examples of this type are limited to caves in the central part of the region under study—the Candelaria system and the San Francisco Hills.

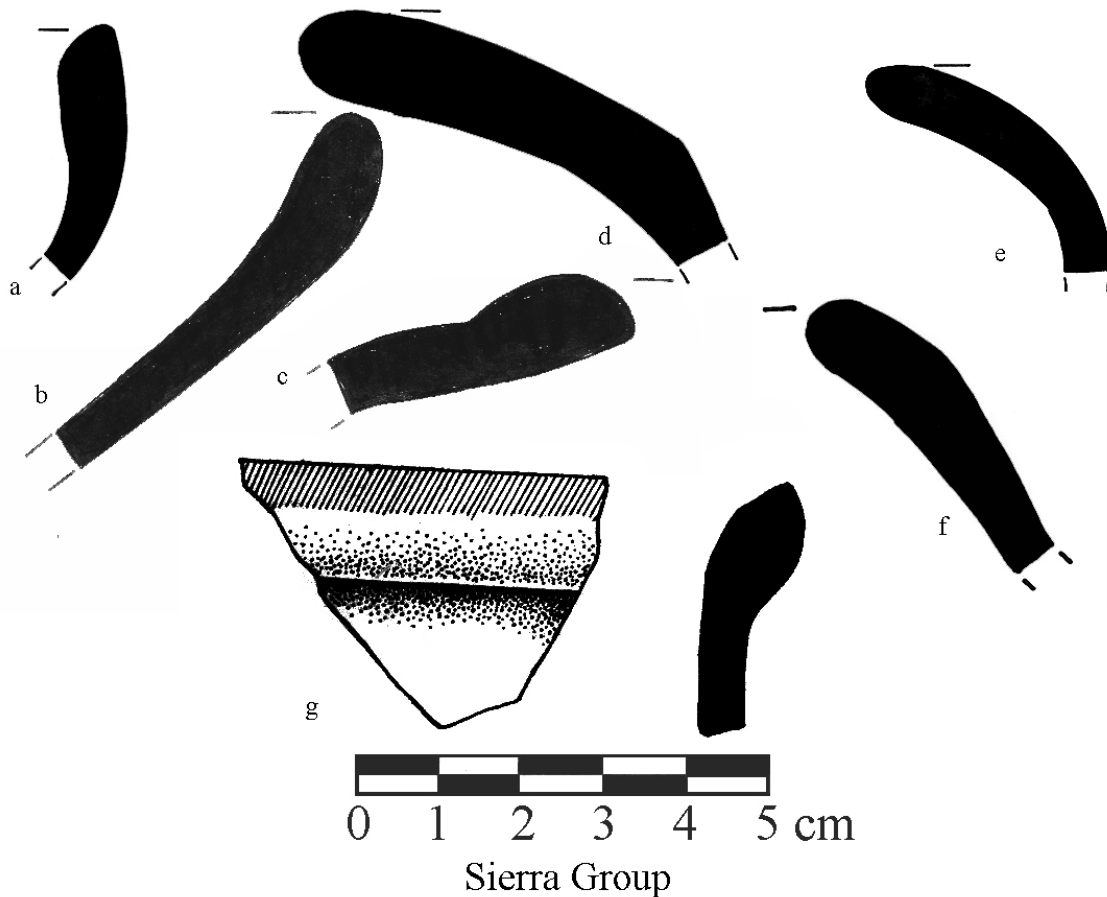
## Monochromes and Dichromes

### *Paso Caballo Ware*

*Sierra Group* (34% of the Yitoqil simple)

**Ware:** Paso Caballo Waxy

**Complex:** Chicanel



**Figure 5- 17: Sierra Group, a-g) Sierra Red:Sierra**

**Sample:** 135 sherds and one whole vessel, of which 92 were subject to further analysis.

49% of the sample is composed of body sherds, 38% are rims, 7% are special bodies, 3% are necks; bases and a rim-to-base sherd compose 1% each.

**Principal identifying modes:** 1) A waxy, red slip; 2) red or orange paste with variable temper; 3) a jar, bowl, or plate form.

**Paste:** The paste color is widely variable, spanning from a light red (10R5/6) to a light orange (7.5YR8/3), although it is most commonly red (10R5/6 and 6/6) or reddish orange (2.5YR6/6). The temper is most commonly grog (28%), fine (15%) or medium (14%) quartz, fine sand (11%) or medium calcite (11%), but is occasionally fine or coarse calcite or quartz or a mixture of the two. 53% of the sample has inclusions, which are normally black (28%) or red (12%) ferruginous lumps, pebbles (5%), quartz (3%), or rarely mica (1%), organic materials (1%), or pumice (1%). Exactly half of the sample was well-fired, although there is often a thin or thick central nucleus, and 4 sherds had completely blackened interiors.



**Figure 5- 18: Sierra Red:Sierra Mushroom Pot (photo by the author)**

**Slip:** The slip is waxy and constant in color on the same sherd/vessel, but the actual red painted on the vessel is highly variable within the sample (most commonly 10R4/6, followed by 10R5/6, 5/8, and 3/6, but ranging from 7.5R4/6 to 5YR5/6). 39% of the

sample has a cream underslip. 3% of the vessels had an indeterminate slip placement, and 12% of the vessels are only slipped on the interior. 54% of the sherds are slipped on both sides, although the slip on the jars is limited on the interior to the base of the neck. In addition, the exterior slip never extends underneath the vessel. There is fire-clouding present in 13% of the sample.

***Forms:***

1) A general jar form (37%) with a fluid “C” curve from the body to the edge of the rim and a 2.65 cm neck (1.4-3.9 cm). The diameter is 23 cm (17-29 cm), and the wall thickness is 7.8 mm (5-16.9 mm). Four of the sherds have a rounded lip.

2) A plate with sloping walls (23%) and a flat base, often with a large medial flange located 1.9 cm below the rim (1.3-2.5 cm). The lip is normally rounded (67%), in one case with a groove around the circumference. Other examples have an interior bevel (19%), or a grooved (7%) or squared (4%) lip. It has a diameter of 30 cm (17-41 cm), and the wall thickness is 10.7 mm (6.8-14.5 mm).

3) A general bowl or plate (19%) with a rounded lip and, in one case, a flat base. The diameter is 24 cm, and the wall thickness is 8.5 mm (4.9-12.8 mm). In one case there is a Z-angle 1.8 cm below the lip.

4) A bowl or plate with flaring walls (10%) and a rounded (67%), squared (17%), or pointed (17%) lip. The rim is rarely thickened in the exterior. The diameter is 30 cm (between 20 and 41 cm), and the wall thickness is 10 mm (9.4-11.1 mm).

5) A round, slightly incurving bowl (6%) with a rounded (75%) or interior beveled (25%) lip, occasionally with an interior bolster. The diameter of the vessel is 27.4 cm (13-38 cm) and the wall thickness is 9.7 mm (6.1-13.3 mm).

6) A tecomate (2%) with a rounded lip and a rim that is bolstered on the exterior on one of the two examples. The diameter is 27 cm (23-31 cm), and the wall thickness is 11.7 mm (10.8-12.7 mm).

7) A general cup form (1%) with a wall thickness of 9.7 mm.

8) A mushroom pot (1%) with textile impressions on the head and a small, pre-firing hole punched into the bottom of the head.

***Distribution:*** Shrines in northern  $\frac{3}{4}$  of the region—the caves around Raxruha Viejo, the Candelaria Caves, the San Francisco Hills, and Tres Islas.

***Type:variety Designation:*** The sample of Sierra can be broken into three different types which were established by at Uaxactun:

Sierra Red:Sierra (R.E. Smith and Gifford:1966) 123 sherds (figure 5-17 *a-g*) and one whole vessel (figure 5-18)

Laguna Verde Incised (R.E. Smith and Gifford:1966) 10 sherds

Largatos Punctated (R.E. Smith and Gifford:1966) 1 sherd

***Decoration:***

1) *Plain* (92%): The plain sherds come from a wide variety of vessels representing all of the forms and pastes in the group sample. There is a cream underslip in 39% of the sample.

2) *Incised* (7%): The incisions tend to be simple geometric incisions or even simpler lines. With the exception of one sherd with pre-slip incisions, all of the examples are post-firing. A much higher percentage of the incised sherds (80%) have a cream underslip. The vessels with this decoration tend to be sloping or flaring-walled plates, although bowls and jars are occasionally present.

3) *Punctated* (1%): One jar fragment has a row of simple, triangular punctations below the neck that were made after the vessel was fired.

***Interregional comparisons:*** Sierra is a ubiquitous lowland group, spanning from northern Alta Verapaz (Dillon 1979:74-5) to Becan (Ball 1977:17-21) and Mayapan (Smith 1971:138-9) in the Yucatan, and from Yaxchilan (López Varela 1989:82) to Colha (Valdez 1987:114).

In the southwestern Petén (Foias 1996:292-9, Sabloff 1975:77-8, Adams 1971:21), bowls and plates, often with medial flange, are the most common form, although short-necked jars are also present. Lips are most commonly rounded, and the paste is normally brown (Seibal and the Petexbatun), grey, or yellow (Altar) with calcite or occasionally grog temper at all sites. Diameters range from 30-35 cm at Seibal (slightly smaller in the Petexbatun) for bowls and around 24 cm for jars (in the Petexbatun). Wall thickness approximates that of the present sample, with a mean of around 8 cm in the Petexbatun.

Plates and bowls dominate the samples in the Dolores Valley (Laporte *et al.* 1993:71), where Sierra Red alone forms over a third of the sample of Paso Caballo ware. At Salinas de los Nueve Cerros (Dillon 1979:74-5), the sample mostly consists of flaring-walled bowls and jars or tecomates, although there are also Z-angled bowls with hollow feet, which might be an Early Classic variety. Like most of the pastes from the site, temper seems to be a sort of “kitchen sink” approach, with many different tempers present, although it is near the local sample in color—reddish orange to brick red. Lips are normally rounded on jars and bowls, and, in the latter case, often have everted or



bolstered rims. Mushroom pots (de Borhegyi 1963) in the Sierra Group are generally rare in the lowlands, but have been identified at La Joyanca (Forné 2005:368-9)

In the central Petén (Culbert n.d., Smith 1955:118-24, Forsyth 1989:21-7), Sierra begins earlier than in other areas, and at Tikal (Culbert n.d.) the earlier variety (Ahcax) has a distinct red paste with carbonate and possibly grog particles present in the majority of sherds. Bowls or dishes are the most common forms, although 20% of the sample is a narrow-mouthed jar. At Barton Ramie (Gifford 1976:88-90) as in the central Petén, calcite temper dominates the Sierra sample, although the paste is normally orange. Forms are consistent with other lowland regions.

In the northern highlands (Sharer and Sedat 1987a:271), local continuity is stronger than interregional ties, as the Middle Preclassic type Chirrum Red continues until about 200 B.C. Inupal Red (ibid:294) becomes the dominant red type until 1 B.C., and is typified by (most commonly) a flaring-necked jar, fine ash temper, and a pale red slip. There is, however, a small amount of material that was classified as Sierra Red from two sites in the Salama Valley (ibid. 300), with everted or direct rims and pre-slip circumferential grooving near them. In Alta Verapaz, Berro Red-on-Natural (Arnauld 1986:323) has jars with a similar, flaring-walled form, although there is often a sharp angle at the widest point of the body. The paste is brown to pink, and the temper is quartz, pumice, and mica. The surface treatment is similar to the Salamá Valley collection. In La Lagunita, Foscopi Red (R. Viel 1984:58-60, Ichon and Arnauld 1985:111-2) and Roqueño Red (R. Viel 1984:80-1, Ichon and Arnauld 1985:132) are similar types.

Santa Tecla Red is a common group in the central and southeastern highlands at Chalchuapa (Sharer 1978:32), Santa Leticia (Demarest 1986:67-74), and Jutiapa (Bond 1989:41-3). This type is also common at Kaminaljuyu, where members of the Santa Tecla and Otocuitla (orange-slipped, see description for Baclam Orange below) groups are classified as Rofino (Shook and Kidder 1952:90, Hatch 1997:145-6). The red tends to be more purple than the present sample, and the forms are restricted to shallow and deep bowls.

Punctations are a rare mode of decoration with limited distribution that is only present in small quantities at the sites where it appears. In the southwestern Petén, it is present in a small quantity at Seibal (Sabloff 1975:84. 3 sherds) and Altar de Sacrificios (Adams 1971:46, where it is “very rare”). The punctations are normally small and circular and enclosed inside of two incised bands (in contrast to this collection). A related decoration with impressions (normally finger or fingernail impressions) is found in the Petexbatun (Foias 1996:301-3). The type is either an open bowl or jar with a thin wall (3-5 mm) and a carbonate or quartz paste. At Altar the walls are between 7 and 9 mm thick.

In the central Petén (Culbert n.d., Forsyth 1989:31-3), punctations are present in small quantities. One example, a jar from El Mirador, has similar, triangular indentations. A second punctated type, Hiabon Punctated, was also identified at Tikal (Culbert n.d.). It is restricted to Z-angled bowls or mushroom stands, and has alternating rows of punctations bounded by angles in the vessel profile. Punctations were not recorded in any of the red-slipped Late Preclassic highland collections outside of

Kaminaljuyu, where they are a decorative mode on Monte Alto Red ware (Hatch 1997:121-4).

***Intraregional comparisons:*** Apart from form, there is a fair amount of standardization throughout the region. Vessel lips are most commonly rounded, and the greatest degree of variability is also found in the site with the largest sample (Tres Islas). The paste is most commonly quartz tempered throughout the region, although at Tres Islas quartz and grog are found in equal amounts, and calcite is also common.

The form is most commonly a jar at Tres Islas and in the San Francisco Hills, although it is not represented in the Candelaria Caves (where there are only two sherds—a bowl and a tecomate), and only one example is present in the caves around Raxruha Viejo. The next most common form at Tres Islas and in the San Francisco Hills is a sloping-walled plate. Sloping-walled plates are relatively common in the northern half of the region, whereas general bowl forms or tecomates are most common in Candelaria and the caves around Raxruha. Incisions and punctuations are only present in the northern part of the region.

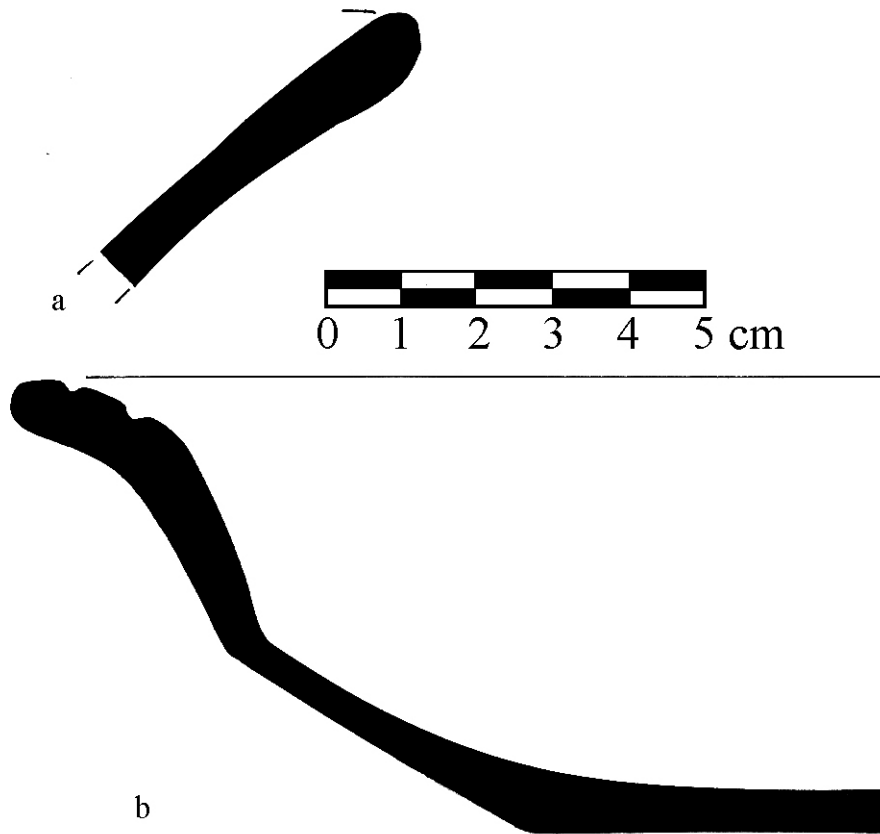
*Flor Group* (13% of the Yitoqil sample)

***Ware:*** Paso Caballo Waxy

***Complex:*** Chicanel

***Sample:*** 52 sherds, 24 of which were subject to further analysis. Nearly half of the sample (46%) is body sherds; the rest are bases (23%), rims (10%), special bodies (4%), or rim-to-base sherds (2%).

**Principal identifying modes:** 1) A waxy, cream slip; 2) orange or yellow paste with quartz, calcite, or sand temper; 3) a plate, bowl, cup, or jar form.



## Flor Group

**Figure 5- 19: Flor Group, a) Flor Cream:Flor, b) Acordión Incised:Acordión**  
**Paste:** The paste is normally a light orange or yellow (2.5YR5/6, 5YR8/2, 7.5YR8/2, or 10YR8/2), although two sherds have a reddish paste (10R6/6 and 8/2). The temper is variable, with medium (28%) or fine (24%) quartz particles being the most common, followed by fine (8%) or medium (4%) sand or calcite (20%) of any grade. A mixture of medium calcite and quartz is somewhat common (12%), and one example has grog

temper (4%). There are often ferruginous inclusions (52%), occasionally with charcoal (9%) or pebble (4%) inclusions as well. Some examples (32%) have a dark nucleus, which is typically thick.

**Slip:** A waxy, reddish to yellowish cream slip (2.5YR7/1 to 10YR8/3) that occasionally is discolored by the firing process. Many of the sherds are slipped only on the exterior (54%) or interior (19%), the former of which does not have slip extending onto the base. The other 23% of the sample is slipped on both sides, and, in one case, the slip does cover the exterior base as well.

**Forms:**

- 1) A jar (54%) with a continuous “C” curve from the body to the rounded lip. The neck is 2.7 cm tall (1.7-3.6 cm), the walls are 7.9 mm thick (5.3-12.1 mm), and the diameter is 20 cm. A coke-bottle base is present in one case.
- 2) A general bowl or plate form (23%), with a squared (50%) or rounded (50%) lip, walls that are 8.0 mm (5.9-9.6 mm) thick, and a 26 cm diameter (18-34 cm).
- 3) A plate with flaring walls (6%), an interior bevel in the rim, a wall thickness of 8.4 mm (5.6-10.9 mm), and a 42 cm diameter,
- 4) A plate with sloping walls (6%), a lip that is squared or with an interior bevel, a wall thickness of 9.4 mm (7.4-12.1 mm), and a 26 cm diameter (22-34 cm). One nearly complete vessel is 15.8 cm tall.
- 5) A cup (2%) with a rounded lip, direct rim, a 5.2 mm wall thickness, and a 10 cm diameter.
- 6) A miniature jar (2%) with a 6 cm diameter, a 5.2 mm wall thickness, and a squared lip with a direct rim.

**Distribution:** Caves in the northern  $\frac{3}{4}$  of the region—caves around Raxruha Viejo (Cueva 4), the Candelaria Caves, the San Francisco Hills, and Tres Islas.

**Type:variety Distribution:** Two different, pre-established types are present in this sample.

Flor Cream:Flor (R.E. Smith and Gifford 1966:158)—23 sherds (figure 5-19 *a*)

Acordión Incised (R.E. Smith and Gifford 1966:154)—1 sherd and 1 partial vessel (figure 5-19 *b*)

**Decoration:**

1) *Plain* (92%): The undecorated sherds in this group are representative of the group in general—all of the forms (apart from the miniature jar) and all pastes.

2) *Incised* (8%): The incisions were post-firing in both examples and consisted of deep grooves forming concentric circles on the interior of the lip of the plate and fine, simple geometric designs on the exterior of the miniature jar.

**Interregional comparisons:** Flor is a common group in the Maya lowlands—at Seibal (Sabloff 1975:84-6), Altar de Sacrificios (Adams 1971:26), Uaxactun (R.E. Smith and Gifford 1966:158), Tikal (Culbert n.d.), El Mirador (Forsyth 1989:39-41), La Joyanca (Foias 2005:376-7), Barton Ramie (Gifford 1976:93-4), and in the Petexbatun (Foias 1996:303-8) and the Dolores Valley (Laporte *et al.* 1993:68), although it is less common in Belize than in the Petén (Foias 1996:308). The form types and distributions are rather uniform at all sites—normally sloping or flaring-walled bowls, although jars are still relatively common. Lips are normally rounded.

Two white-slipped types are present at Salinas de los Nueve Cerros, Bexsumenc White (Dillon 1979:59-60) and Quetoc White (60-61). The major difference is in paste—the former is red and the latter is grey—and the presence of preslip grooving on the latter.

At Kaminaljuyu, Verbena White (Shook and Kidder 1952:95, Hatch 1997:141-2) is the closest ware. It is most commonly a bowl or jar, although lids have been recovered as well. Cuitipan Cream (Sharer 1978:25-6) is a related type with a high-fired paste and a “dirty” cream or orangish slip. While it was identified at Chalchuapa, it has not been reported at any of the other highland sites. Providencia Cream (Wetherington 1978:72) is a slightly earlier ware than the Kaminaljuyu type that is present as far north as the Salamá Valley (Sharer and Sedat 1987:299). In Alta Verapaz, no cream wares were identified, and the only similar type in Jutiapa, “Unnamed White-Slipped” (Bond 1989:63) is composed of bowls with a much coarser paste.

Incised sherds are rare in the Flor group at other sites in the lowlands. There are a few examples from the Petexbatun (Foias 1996:309-11), Seibal (Sabloff 1975:94, where it is classified as Unnamed Incised), Uaxactun (Smith and Gifford 1966:154), Tikal (Culbert n.d.), La Joyanca (Forné 2005:379-80), the Dolores Valley (Laporte *et al.* 1993:68), and Barton Ramie (Gifford 1976:94-5). Some of the sherds classified as Flor Cream at Yaxchilan (López Varela 1989:79) have incisions as well, so this type is present there but was treated as a mode of the plain type.

Open plate forms with circumferential incisions inside of the lip are present in the Petexbatun sample, but they are accompanied by pre-slip grooves, which are absent here. In Seibal, the only identifiable form is an open bowl with a Z-angle. Incisions are simple

and normally have simple parallel line incisions. An example from Barton Ramie has the same incisions as in the present collection, but the form is not indicated.

In the highlands, Verbena White ware (see description for Acordión Cream above, Shook and Kidder 1952:95, Hatch 1997:141) has incised examples, sometimes with gouging or modeling as well. Gepacina Incised was identified at Chalchuapa (Sharer 1978:26) and consists of bowls with a dark cream slip and simple incised designs. Like Cuitapan Cream, it has not been found outside of Chalchuapa.

Miniature vessels with a cream slip and incisions were not recorded at any of the other sites.

***Intraregional comparisons:*** There are some generalizations that can be made about modes and forms in different parts of the regions, although the relatively small sample size precludes a definitive statement. Rounded lips are the most common in the entire area, and quartz temper is the most common in Candelaria and the San Francisco Hills, although not in Tres Islas, where calcite temper makes up 50% of the sample. Bowl and plate forms are the most common throughout the region, closely followed by jars in Candelaria and Tres Islas. Incised sherds only appear in the San Francisco Hills.

*Polvero Group* (77 sherds, 19% of the Yitoqil sample)

***Ware:*** Paso Caballo Waxy

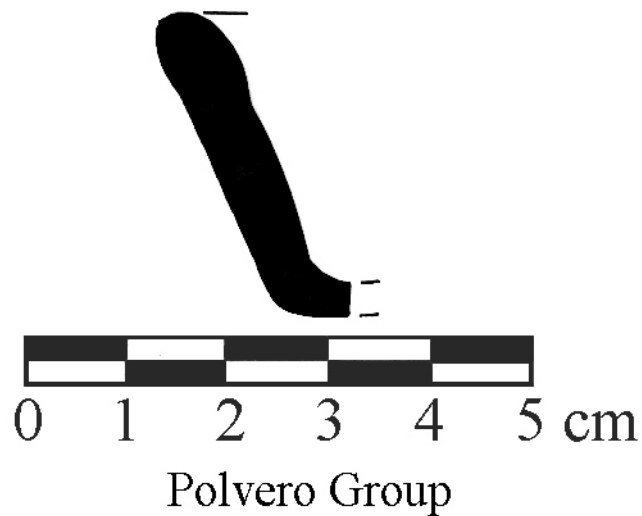
***Complex:*** Chicanel

***Sample:*** 77 sherds were identified, 43 of which were subject to further analysis. 65% of the sample is composed of body sherds, followed by rims (27%) and bases (4%). Special



body parts, necks and shoulders, and body-to-base sherds each compose 1% of the sample.

**Principal identifying modes:** 1) A waxy, black slip; 2) reddish to orange paste with calcite, sand, or quartz temper; 3) a plate, bowl, cup, or jar form.



**Figure 5- 20: Polvero Group, Zelda Fluted:Zelda**

**Paste:** The paste is of variable color, from a dark red (7.5R4/6) to a light orange (5YR7/6), although it is most commonly an orangish red (10R5/6) or a reddish orange (2.5YR5/6). The temper consists of quartz (35%) or calcite (22%) of varying sizes, fine sand (13%), a mixture of medium calcite and quartz (11%), or grog (15%), although one example (2%) has a medium volcanic ash temper. About half of the sample has either black (40%) or red (13%) ferruginous inclusions. The majority of the sample (55%) was well-fired. In cases where the vessel was not, there is often a thick dark nucleus (33%), which has completely blackened the paste in 6 examples. Occasionally there is a thin, dark nucleus in the center of the sherd or on the interior or exterior side.

**Slip:** A thick, waxy black slip. While 9% of the sherds have indeterminate slip placement, most sherds are slipped on either the exterior (35%) or interior (21%) alone,

and 35% have slip on both sides, which does not extend past the base on the exterior.

13% of the sample has a cream underslip, while the primary slip is normally simply placed atop a smoothed surface.

**Forms:**

1) A general bowl or plate form (34%) with a rounded (40%) or squared (60%) lip, in two cases with a shallow groove just inside of the lip. Only two bases are present-- a coke-bottle base and a ring base. The diameter is 22.3 cm (18-31 cm), and the wall thickness is 8.4 mm (6.5-11.4 mm).

2) A jar (26%) with a fluid "C"-curve from the body to the rounded lip, a wall thickness of 6.8 mm (3.8-12.1 mm), and an 11 cm diameter.

3) A plate with sloping walls (8%) and a rounded (75%) or squared (25%) rim. The diameter is 35 cm (24-41 cm) and the wall thickness is 9.5 mm (6.3-13.1 mm).

4) A plate with flaring walls (1%) and a rounded lip. The diameter is 18 cm, and the wall thickness is 8.9 mm.

5) A slightly incurved round bowl (3%) with a rounded or pointed lip and a 30.5 cm diameter (29-32 cm). The wall thickness is 8.5 mm (7-9.9 mm).

6) A cup (1%) with sloping walls and a rounded lip with a wall thickness of 5.3 mm.

**Type:variety Designation:** Three previously established types were identified in the sample. Two of the sherds belong to a new type.

Polvero Black:Polvero (R.E. Smith and Gifford 1966:161)—72 sherds

Lechugal Incised:Lechugal (R.E. Smith and Gifford 1966:159)—2 sherds

Zelda Fluted:Zelda (Laporte, pers. comm. 2006)—1 sherd (figure 5-20)

Unnamed Straited (established in the present study)—2 sherds

***Decoration:***

1) *Plain* (94%): The undecorated sherds in this sample are representative of the group in general, with examples spanning all forms and paste colors.

2) *Incised* (3%): The incisions are fine and post-firing, and form very simple designs. Incisions are limited to bowls with sloping walls.

3) *Fluted* (1%): One of the sherds belonging to a bowl with sloping walls has horizontal fluting on the exterior wall.

4) *Striated* (3%): Two of the sherds, both from bowls, have a highly-burnished black slip on the interior and deep striations (similar to those found in the Achiotes group) on the exterior.

***Interregional comparisons:*** This type is very common in the Maya lowlands, appearing at Seibal (Sabloff 1975:87), Altar de Sacrificios (Adams 1971:24), Uaxactun (Smith and Gifford 1966:161), Tikal (Culbert n.d.), La Joyanca (Forné 373-4), El Mirador (Forsyth 1989:36-8), Colha (Valdéz 1987:117) and in the Petexbatun (Foias 1996:317-20) and the Dolores Valley (Laporte *et al.* 1993:75). It is most commonly a bowl outside of this region and normally has calcite temper.

Black slip is absent in much of Alta Verapaz (c.f. Arnauld 1986) until the Early Postclassic, so no similar types are evident there. No black slips were found in the Salamá Valley (Sharer and Sedat 1987a), but Glossy Black ware was identified in Preclassic contexts in Los Encuentros and parts of the departments of Quetzaltenango and Quiché (Ichon and Hatch 1980:123-5). The paste has pumice and quartz temper, and the most common form is a bowl (with interior- or exterior-sloping or out-flared walls),

although cylinders are also present. This ware sometimes has grooves or incisions or occasionally pre-slip impressions. Nogaro Brown-Black is a type found at La Lagunita and is described below.

Pinos Brown-Black is a common type in the central and southeastern highlands, identified at Chalchuapa (Sharer 1978:36), Santa Leticia (Demarest 1986:59-67), Jutiapa (Bond 1989:43-5), and Kaminaljuyu, where it is identified as Kaminaljuyu Brown-Black (Shook and Kidder 1952:68, Hatch 1997:148-50) or Miraflores Black-Brown (Wetherington 1978:55). The type also appears in the Salamá Valley (Sharer and Sedat 1987a:294-5). It is most common in the central highlands (Demarest 1986). It is defined by a very polished black, brown, or grey slip and a bowl form.

Incised decoration is very rare both here and at other sites in the Maya lowlands, but present in small quantities at all sites where the group is found. Canchon Fine-Incised is a part of the Pinos Group that is common in the central highlands but rare or absent at sites in El Salvador (Demarest 1986:59-67, see description for Pinos Brown-Black above). It is also present in the Salamá Valley (Sharer and Sedat 1987a:296). The other incised type in this group, Jorgia Coarse-Incised, is more common throughout the highlands but less related to the present sample.

Very small quantities sherds with fluting have been found in a few sites in the Maya lowlands, and all appear to be very similar. In the Petexbatun, an undesignated fluted type was reported by Foias (1996:324)—an open bowl with vertical or flared walls, calcite temper, and a wall thickness between 4 and 7 cm. Other undesignated black-slipped and fluted jar sherds were found at El Mirador (Forsyth 1989:39). This type of decoration is also present in the southwestern Petén (Laporte *et al.* 1993:76). All of the

fluting seems to be horizontal and just below the lip (with the exception of one sherd from the Dolores Valley, where the entire exterior is fluted).

In the highlands, fluting is only present in the Pinos Group at Kaminaljuyu (Hatch 1997:149), although both gadrooning and chamfering have been identified in the sample at Santa Leticia (Demarest 1986:59-67), and pre-slip grooving is a mode found in Jutiapa (Bond 1989:45).

No black-slipped sherds with striations have been reported from other sites.

***Intraregional comparisons:*** Polvero group ceramics are found throughout the northern  $\frac{3}{4}$  of the region, but are mostly limited to the San Francisco Hills and Tres Islas.

Rounded rims are the most common in the entire sample although there is more variability in Tres Islas, since the sample there is bigger. The temper is most commonly calcite in the central part of the San Francisco Hills and Tres Islas; quartz is most common in the eastern part of the San Francisco Hills. Most decorated sherds are found in the San Francisco Hills, although the fluted sherd was found in a cave in Raxruha Viejo and one of the striated examples was found at Tres Islas.

*Baclam Group* (82 sherds, 21% of the Yitoqil sample)

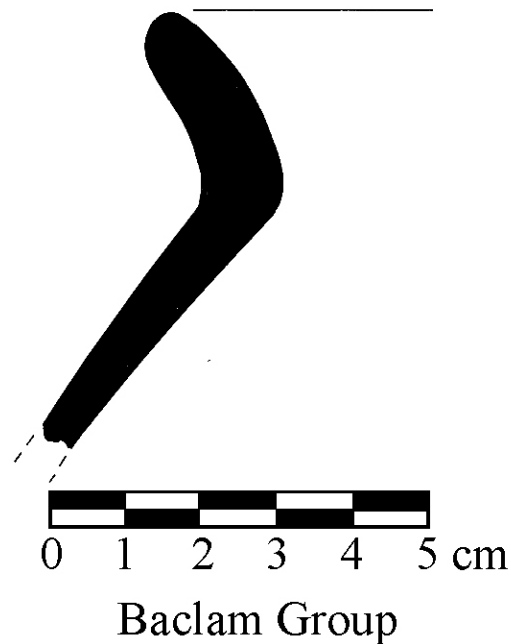
***Ware:*** Paso Caballo Waxy

***Complex:*** Chicanel

***Sample:*** 79 sherds and 1 whole vessel, of which 30 were subject to further analysis.

Body sherds are the most common (62%), followed by rims (29%), rim-to-base sherds (6%), and special body sherds (3%).

**Principal identifying modes:** 1) An orange slip; 2) red to tan paste with quartz, calcite, or sand temper; 3) a bowl, jar, or mushroom pot form.



**Figure 5- 21: Baclam Group, Baclam Orange: Baclam**

**Paste:** The paste is of variable color, from a light red (10R5/6) to a light tan (7/5YR6/4), but most commonly a reddish orange (2.5YR/6) or a light orange (5YR7/4). The temper is composed of fine (23%) or medium (40%) quartz, a mixture of medium calcite and quartz (23%), fine (3%) or medium (3%) calcite, or fine sand (3%), often with black (53%) or red (10%) ferruginous lumps or, in one example, charcoal (3%). There is occasionally a dark nucleus from firing.

**Slip:** The slip is a solid, stable orange (most commonly 2.5YR5/8, 5YR5/6, and 5YR5/8, but the color ranges from 2.5YR4/8 to 7.5YR6/6) which was placed on a cream slip in 27% of the sample. There is fire-clouding present on 29% of the sherds. The slip is normally present on both sides (51%), although the jars are only slipped on the interior

rim to the base of the neck. 47% is slipped only on the exterior, and the final 1% is composed of a single sherd with exclusively interior slipping.

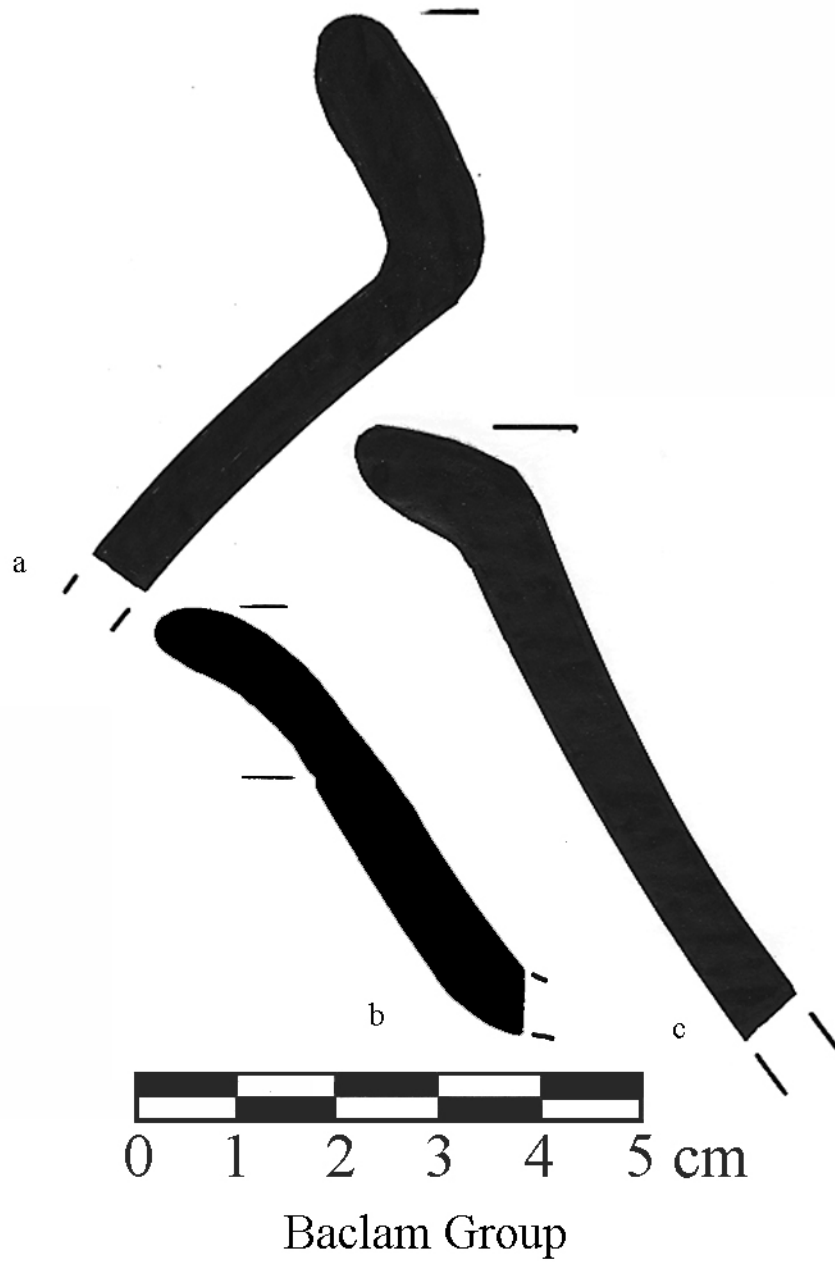


Figure 5- 22: Baclam Group, a, c) Baclam Orange:Baclam, b) Cay Incised:Cay

**Forms:**

1) A jar (23%) with a fluid “C”-curve from the body to the rounded (50%) or squared (50%) lip. The neck is 2.1 cm (1.8-2.4 cm), the wall thickness is 8.1 mm (5.6-12.6 mm) and the diameter is 25.7 cm (22-28 cm).



**Figure 5- 23: Baclam Group, Baclam Orange:Baclam Mushroom Pot**

2) A plate with sloping walls (23%) and a lip that is squared (89%) or occasionally (11%) rounded. The diameter is 23.2 cm (15-30 cm), and the wall thickness is 7.2 mm (5.5-8.3 mm).

3) A general cup form (14%) with a 15 cm diameter and a squared lip. The wall thickness is 5.4 mm (3.2-6.6 mm).



4) A general bowl form (13%) with a squared lip and an 18 cm diameter. The wall thickness is 6 mm (4.2-7.8 mm).

5) A slightly incurving bowl (5%) with a rounded or squared lip and a diameter of 19.5 cm (18-21 cm). The wall thickness is 6.2 mm (4.7-7.3 mm).

6) A plate with flaring walls (3%) with a squared or interior-beveled lip and a 22 cm (18-26 cm) diameter. The wall thickness is 9.4 mm (8.9-9.8 mm).

7) A mushroom pot (2%) with textile impressions on the head and a small, pre-firing hole under the head.

**Type:variety Designation:** Two pre-established groups are present in the sample:

Baclam Orange:Baclam (Culbert n.d.)—58 sherds (figure 5-21; 5-22 *a, c*), 7 modified sherds, and a whole vessel (figure 5-23).

Cay Incised:Cay (Culbert n.d.)—15 sherds (figure 5-22 *b*) and 1 modified sherd.

**Decoration:**

1) *Plain* (70%): Most of the sample is undecorated.

2) *Incised* (30%): The slip is normally on both the interior and exterior of the vessel, but two examples have an exterior-only slip. The incisions are always post-firing with different geometric motifs. Some of the examples have discolored patches, presumably from the firing process. The forms are limited to cups and bowls.

**Interregional comparisons:** This type has been reported at very few sites, but it is unclear whether this is from grouping into Sierra Red or from an absence in much of the lowlands. In the Mirador Basin, there is a small amount of orange slip present in the Chicanel sample, but it is unintentional, unlike the present sample (Forsyth, pers. comm. 2006).

This type has been identified at Tikal (Culbert n.d.) and in the southeastern Petén (Laporte 1993 *et al.*:69-70). It is a minority type in both of the samples, possibly related to Iberia Orange (see below). Jars are common at Tikal (as they are here), but in the Dolores Valley the dominant forms are plates and bowls. The paste at Tikal has a calcite temper.

Orange slip is more common in the highlands during this time period. Three different types are present during this time period in the Salamá Valley—Ixloc Orange (Sharer and Sedat 1987a:293-4), a Middle-Late Preclassic transitional type; Chopen Orange:Salamá (Ibid.:290), a variety dating to between 200 and 1 B.C.; and Chitucan Orange (Ibid.:296-7), which was the dominant form between 1 and 200 AD. Ixloc and Chitucan have an easily-eroded slip, and the surface color of Ixloc is much lighter and closer to the present sample. The forms are most commonly bowls (flared or rounded walls), or occasionally flaring-necked (Chopen and Chitucan) or vertical necked (Ixloc) jars. Ichon and Hatch (1980:113-9) identified several Preclassic orange wares in Los Encuentros.

Chubal Orange (Dillon 1979:63-5) at Salinas de los Nueve Cerros is represented by cuspidor-shaped bowls and an easily-eroded dull orange slip. Like Baclam Orange, the slip is variable, covering yellows, oranges, and reds, but this variation is normally present on each vessel. In some cases, the slip is waxy. Borayo Orange is a contemporaneous type from Alta Verapaz (Arnauld 1986:320, see below) with a slightly redder slip. Orfeo Orange (R. Viel 1984:60-5, Ichon and Arnauld 1985:113-4) is a similar type found at La Lagunita. Cardumen Orange-Brown (R. Viel 1984:71-2, Ichon

and Arnauld 1985:119) is also similar and consists of jars with irregular sloping decks with an 18-34 cm diameter.

Further into the highlands, Otocuitla Orange is common at Chalchuapa (Sharer 1978:35), Santa Leticia (Demarest 1986:76-88), in Jutiapa (Bond 1989:36-41), and at Kaminaljuyu, where it is combined with Santa Tecla into the Rofino Ware. Aside from the orange slip color it is identical to Santa Tecla (see description for Sierra Red above). Two other orange-slipped types common to El Salvador towards the end of the Late Preclassic, Jicalapa and Izalco, are discussed in the description for Witz Orange below.

Incised sherds in the Baclam group have only been identified at Tikal (Culbert n.d.) and in the southeastern Petén (Laporte *et al.* 1993:70). Two varieties were defined by Culbert, simple incised and geometric-incised. In both cases, they are identical to Baclam Orange with the addition of incisions.

At Salinas de los Nueve Cerros, Tzicbul Incised:Tzicbul is a related type with an open bowl form. The slip is reddish-orange in the interior and thick and fading to tan on the exterior, and incisions are light and limited to cutting through the slip.

Further into the highlands, the Salamá Valley sample has one type from the Late Preclassic (200-1 B.C.), Mojon Grooved-Incised:Mojon Variety (Sharer and Sedat 1987a:290-1), which is most commonly a bowl with flared or in-curved walls. Pre-slip grooving is coupled with post-firing incisions. In Alta Verapaz, some of the Borayo Orange examples have simple, wide incisions (Arnauld 1986:320, for a general description, see below). Some of the orange-slipped wares in Los Encuentros have incisions (Hatch 1980:113-9), as does Orfeo Orange (R. Viel 1984:63, Ichon and Arnauld 1985:114) at La Lagunita. Orange-slipped, incised ceramics in the central and

southeastern highlands are common and identical to the types described in the discussion for Laguna Incised above.

***Intraregional comparisons:*** Most of the sample is limited to the San Francisco Hills, although some undecorated sherds are present at Tres Islas and caves in the Candelaria system. Several of the sherds, both incised and undecorated, are from a cave around Raxruha Viejo. (The northern  $\frac{3}{4}$  of the region—caves around Raxruha Viejo, Candelaria, the San Francisco Hills, and Tres Islas. The majority of the sample comes from the San Francisco Hills.) This form is most commonly found in the eastern part of the San Francisco Hills. The most common types everywhere are plates followed by jars, although the lip form varies among sites. In the central part of the San Francisco Hills, the only extant rim has an interior bevel, and, in the Candelaria Caves, it is squared. In the eastern part of the San Francisco Hills, there are slightly more rounded than squared lips. The temper is predominantly calcite outside of the eastern part of the San Francisco Hills, where 67% of the sample has a quartz temper.

*Boxcay Group* (14 sherds, 4% of the Yitoqil sample)

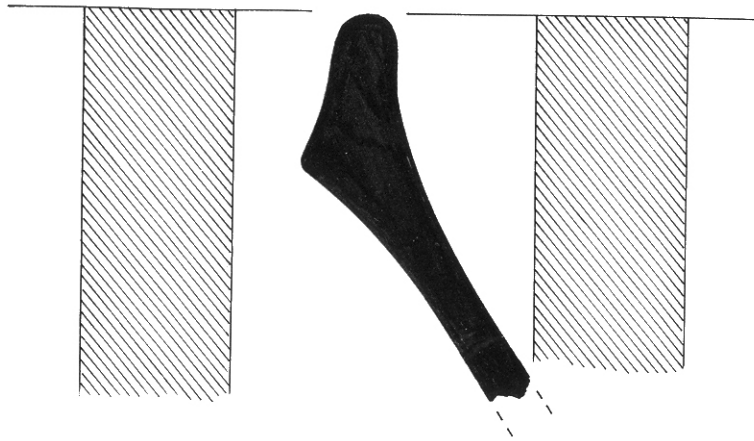
***Ware:*** Paso Caballo Waxy

***Complex:*** Chicanel

***Sample:*** 14 sherds, 11 of which were subject to a more detailed analysis. The majority of the sample is composed of body sherds (64%), followed by rims (21%) and special bodies (14%).

***Principal identifying modes:*** 1) A mottled brown, waxy slip; 2) red to orange paste with sand, quartz, or calcite temper; 3) a plate, bowl, or jar form.

**Paste:** The paste varies between dark red (10R3/4) and light orange (2.5YR6/4, 5YR5/6) with a fine sand (13%), fine (25%) or medium (25%) quartz, or fine (13%) or medium (25%) calcite temper. There are often black (58%) or red (8%) ferruginous inclusions or charcoal (4%) in one example. There is occasionally a blackened nucleus.



Boxcay Group

**Figure 5- 24: Boxcay Group, Boxcay Brown:Boxcay**

**Slip:** The slip normally covers both the interior and exterior of the vessels and has a wide range of tans and browns (from 2.5YR4/4 to 10YR4/3, with most of the sample being 5YR4/4 or 4/6). The paste is waxy and mottled, often with discolorations from the firing process. 86% of the sherds are slipped on both sides, although the interior slip ends at the base of the neck for the jars. The other 14% has slip on the exterior only, and none of the sherds have an underslip.

**Forms:**

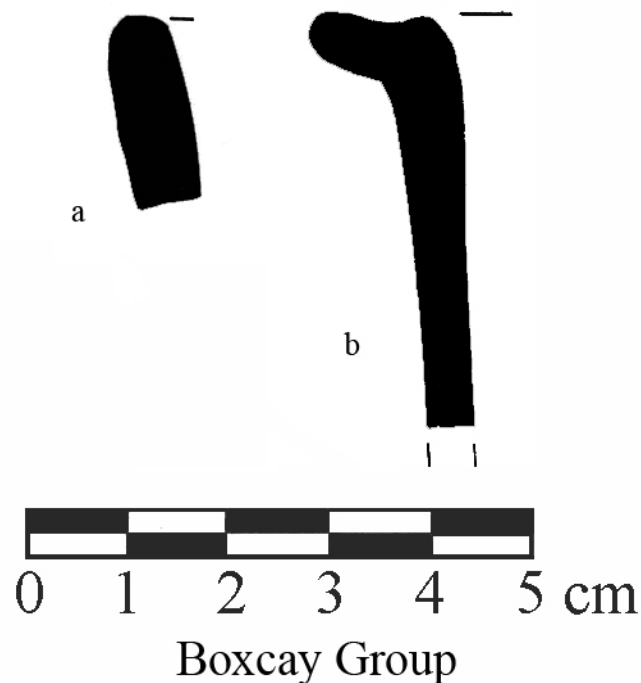
1) A plate with sloping walls (21%) and a rounded or squared lip, in one case with a large, Preclassic medial flange 1.6 cm below the rim. The diameter is 21 cm (18-24 cm) and the wall thickness is 7.5 mm (6.3-9.4 mm)..

2) A jar (21%) with an out-flaring neck, a pointed rim, and an 18 cm diameter.

The wall thickness is 10.1 mm (7.8-8.3 mm).

3) A general bowl form (14%) with a 20 cm diameter and a rounded lip. The wall thickness is 5.2 mm (3.9-6.4 mm).

4) A round bowl (7%) with a wall thickness of 4.6 mm.



**Figure 5- 25: Boxcay Group, a-b) Boxcay Brown:Boxcay**

**Type:variety Designation:** Two pre-established types and varieties are present in the

Yitoqil sample:

Boxcay Brown:Boxcay (Culbert n.d.)—11 sherds (figure 5-24, 5-25 a-b)

Xtabcab Incised:Xtabcab (Culbert n.d.)—2 sherds

**Decoration:**

1) *Plain* (85%): The undecorated sherds cover the range of pastes and slip color, and three of the four forms (all but the general bowl form) are present.

2) *Incised* (15%): The incisions are simple, fine, and post-firing, and the designs are simple and geometric. This decoration has only been identified on a general bowl form.

***Interregional comparisons:*** This type is almost as restricted as Baclam Orange, with only three other places where it has been identified—Tikal (Culbert n.d.), the southeastern Petén (Laporte *et al.* 1993:74-5), and Holmul (Callaghan 2006:237). Form is variable throughout the region—bowls and plates make up the entire sample at Holmul and the majority of the collection from the southeastern Petén, while jars are the dominant form at Tikal. The temper is normally calcite. The brown paste is of variable color, occasionally grading into Polvero Black and Flor Cream; fireclouding is common.

At Salinas de los Nueve Cerros (Dillon 1979:92), Caxlan Brown is a Late Preclassic and Early Classic type (the only brown-slipped type present in the sample) with an easily-eroded, chalky slip that shares little in common with Boxcay except for color. Jars with out-flaring necks make up the entire sample.

Further south, Pinos Brown-Black is a type present throughout the central and southeastern highlands and the Salamá Valley (see discussion for Polvero Black above). At Los Encuentros, Ichon and Hatch (1980:125-7) identified the ware Brown-Black Polished, which exists in many parts of the Maya highlands and the Pacific coast. It is typified by pumice and quartz inclusions in the temper, a variant black or brown slip, and sloping- or vertical-walled bowl forms (although jars are occasionally present). There are occasionally appliqués, basal moldings, grooves, or fluting. This ware is present in the Preclassic and the Early Classic.

Incised brown-slipped sherds are present in the same areas that Boxcay Brown appears. The present sample shares the same forms as those from the Dolores Valley (Laporte *et al.* 1993:75) and Tikal (Culbert n.d.), while rounded bowls and tecomates dominate the Holmul sample (Callaghan 2006:237). At Tikal, the vessels are incised over a large portion of the vessel and belong to either a simple-incised and design-incised variety, with most of the examples belonging to the second.

In the highlands, there are two incised black-brown slipped types, Canchon Incised and Jorgia Coarse-Incised, which are discussed in more detail in the description for Lechugal Incised above.

***Intraregional comparisons:*** Since the sample is so small, no real comparisons can be made. This group is found in the northern  $\frac{3}{4}$  of the region—Candelaria, the San Francisco Hills, and Tres Islas. The majority of the sample, including both of the incised sherds, is from the San Francisco Hills.

***Observation:*** It is difficult to say with much certainty if the brown slip was intentional on the sherds classified as Boxcay, unlike the Boolay and the Chichicaste group ceramics. In this respect, the Chicanel ceramics appear to be more like the Early Classic, where many of the sherds classified as Pucte were probably from badly-fired Águila vessels. The Early Classic Boxcay Brown:Peralta suffers from the same problem. Hatch (1980:119) noted a similar classification problem regarding the overlap of orange and brown slips in Los Encuentros.

*Differentiated Color Group* (23 sherds, 6% of the Yitoqil sample)

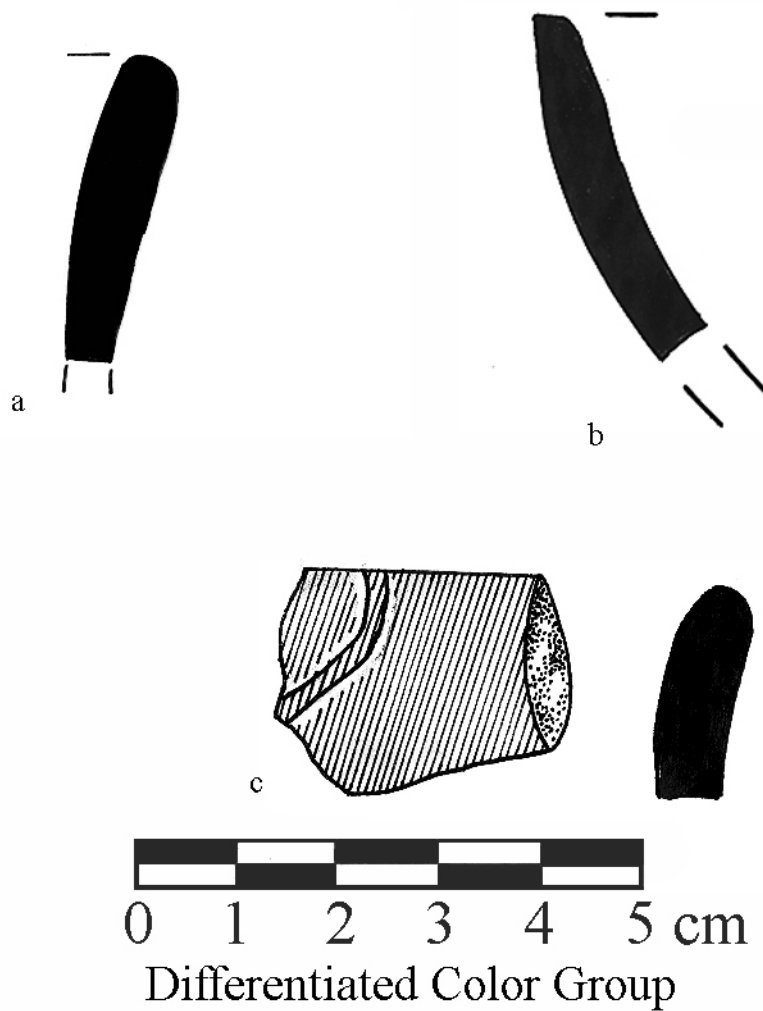
***Ware:*** Paso Caballo Waxy



**Complex:** Peripheral Chicanel

**Sample:** 23 sherds, 16 of which were subject to more detailed analysis. Body sherds are the most common (73%), followed by rims (18%), with one base sherd and one rim-to-base sherd.

**Principal identifying modes:** 1) A bowl with 2) each side slipped a different color; 3) light orange paste with calcite and quartz or grog temper.



**Figure 5- 26: Differentiated Color Group, a) Guachiman Dichrome:Guachiman, b) Chimuelo Dichrome:Chimuelo, c) Velerio Dichrome:Mateo Red-and-Cream**

**Paste:** The paste ranges from an orangish red (10R6/6) to a light orange (5YR8/4), clustering around the orange side of the spectrum (5YR7/6 to 8/4). The temper is most commonly fine (50%) or medium (13%) quartz or a mixture of quartz and calcite (19%), but is occasionally grog (13%) or fine sand (6%). There are normally inclusions—black (50%) or red (7%) ferruginous lumps or mica (7%)—and in 46% of the sample there is a dark nucleus, which is normally thin.

**Slip:** The slip is variable and is always of a different color on each side. The cream slip spans 5YR6/4 to 8/4, and the red spans 10R3/6 to 2.5YR4/8 (the latter being the most common with 3 examples). Oranges are between 2.5YR5/8 and 5YR6/2, and the only brown slip is 5YR3/3. There is a cream underslip in 13% of the sample.

**Forms:**

1) A general bowl or plate form (73%) with a 7 mm wall thickness (4.5-11.5 mm). There are two rims present—one with a rounded lip, a bolstered exterior on the rim, and a 28 cm diameter and the other two with an interior bevel and 14 and 24 cm diameters (the average diameter of all three is 22 cm).

2) A slightly-incurved bowl (14%) with a wall thickness of 5.5 cm.

3) A bowl with vertical walls (5%) with a squared lip, a wall thickness of 8 cm, and a 12 cm diameter.

4) A Z-angled bowl (5%) with a wall thickness of 9.7 cm

**Distribution:** The northern half of the region—the San Francisco Hills (CHO-11-1) and Tres Islas.

**Type:variety Designation:** Preclassic dichromes have proven troublesome to classify, and they are often placed into a standard monochrome group according to either the

interior or exterior color. Work by Laporte and his team in the Southeastern Petén has uncovered a much wider variety of dichromes than are found in other parts of the Maya World, which has prompted their standardization in classification and the creation of a special group for all of the dichromes (Laporte and Corzo 2002). Since the present sample appears to be so closely related to theirs, I have adopted their nomenclature. The types and varieties present in this sample are the following:

Velerio Dichrome:Mateo Red and Cream (Mateo Red and Cream was established as a type by R.E. Smith and Gifford 1966:170, Velerio Dichrome was established as a type with Mateo as a variety by Laporte and Corzo 2002:512), which is characterized by a cream exterior and red interior. 3 sherds (figure 5-26 *c*)

Velerio Dichrome-Incised:ND/red interior (Laporte and Corzo 2002:512, the variety was established by Laporte and Mejía 2005:352), which has a cream exterior and a red interior. 4 sherds

Guachiman Dichrome:Guachiman (Laporte and Corzo 2002:512), which is characterized by a black exterior and red interior. 3 sherds (figure 5-26 *a*)

Guachiman Dichrome-Incised:ND/red interior (Laporte and Corzo 2002:512, the variety was established by Laporte and Mejía 2005:352), with a black exterior and a red interior. 1 sherd

Chimuelo Dichrome:Chimuelo (Laporte and Corzo 2002:512), which is characterized by an orange exterior and brown interior. 1 sherd (figure 5-26 *b*)

Chimuelo Dichrome:ND/black interior (Laporte and Corzo 2002:512; the variety was established by Laporte and Mejía 2005:352), which is characterized by an orange exterior and black interior. 6 sherds.

Hechizo Dichrome:Hechizo (Laporte and Corzo 2002:512), which is characterized by a red exterior and black interior. 4 sherds

Hechizo Dichrome:ND/cream interior (Laporte and Corzo (2002:512); the variety was established by Laporte and Mejía 2005:352), which is characterized by a red exterior and cream interior. 1 sherd

**Decoration:** The basic decorative mode for this group is the presence of different colors on the interior and exterior of the vessel, but several of the sherds also have simple incisions.

1) *Dichrome* (78%): Several different combinations are present in this sample. In order of frequency, they are as follows—orange exterior and black interior (33%), red exterior and black interior (22%), cream exterior and red interior (17%), black exterior and red interior (17%), red exterior and cream interior (6%), and orange exterior and brown interior (6%).

2) *Dichrome-Incised* (22%): 5 sherds fall into this category—4 with a cream exterior and a red interior, and another with a black exterior and a cream interior. All have the addition of simple designs made with fine incisions.

**Interregional comparisons:** Dichromes are rather rare in the Maya lowlands during this time period. Black and red dichromes are reported at several sites in the Maya lowlands, and were originally classified as Matamoro Bichrome (established by Pring 1977) as part of the Sierra group. Red and black dichromes have been identified in northern Belize (Pring 1977, Kosakowsky 1987:79) and in the Dolores Valley (Laporte *et al.* 1993:73). They have also been identified at La Joyanca and designated as Sierra Red:Black (Forné 2005:366-8).

The most common lowland dichromes are cream and red. Any vessel with this combination has traditionally been classified as Mateo Red and Cream (part of the Flor Group) without stating how the color was distributed on the vessel. In the present study this could mean either Velerio Dichrome: Mateo Red and Cream or Hechizo Dichrome: ND/cream interior, the latter of which is not present in this sample.

At Barton Ramie, a small amount of Mateo Red and Cream was reported (15 sherds), all of which are shallow dishes with a round rim, a variable diameter (27-47 cm), and occasionally a medial flange. The wall thickness is normally between 7 and 8 mm. In the Petexbatun and at La Joyanca (Forné 2005:377-8), the red and cream are interchangeable, and the vessel form is a bowl or plate with incurving or flared walls, most commonly with an interior beveled rim. The paste is carbonate. The small sample from Seibal (3 sherds, potentially from the same vessel; Sabloff 1975:94-6) has the color break between a probable medial flange instead of on the lip, and the Altar sample (Adams 1971:28) has a red exterior and cream interior, which is not present in this sample.

In Tikal, a related type, Boolim Red-on-Cream was identified, which is slightly earlier than in the rest of the region (Tzek complex) and has the interchangeable colors on the two sides of the vessel. The forms are normally straight-walled dishes, but some rounded bowls are present. Matamoro Bichrome was defined to include either black or cream in addition to the red, so this color combination is also found in northern Belize. A red and cream dichrome did exist throughout the highlands (Rands and Smith 1965:119, 123), which was established as Utatlan Bichrome at Zacualpa (Lothrop 1933:11), and has been reported in Baja Verapaz (Sharer and Sedat 1987a:299) and in the

Chixoy Basin (Ichon and Hatch 1980:129-32). This dichrome has a deep, shiny red slip on the exterior and a smoothed, light tan interior in a bowl or plate form. A single example of Trovador Red-on-White at La Lagunita (Ichon and Arnauld 1985:117) has a red-brown exterior and a grey interior. One Protoclassic sherd was found at La Lagunita (Ichon and Arnauld 1985:163) with a cream exterior and an orange interior.

Chimuelo Dichrome:ND/black interior has only been reported in the southeastern Petén (Laporte, pers. comm. 2006) and the present sample. A related type from Salinas de los Nueve Cerros (Dillon 1979:104), Pachach Dichrome, is a flared-walled bowl with a dull orange exterior and a burnished black smudged interior. Designs are painted on the exterior in black. Dillon placed the type into the Late Classic based on form, but no definitive placement could be made.

Incised dichromes are much rarer and are limited to red with either cream or black. A similar type defined in Belize, Matamoro Bichrome-Incised (established by Pring 1977), was originally placed in the Sierra Group. It had red and black (or occasionally cream) slips on opposite sides of the vessel and has been identified at Cuello (Kosakowsky 1987:79) and in the Dolores Valley (Laporte *et al.* 1993:73), although fluting was present in the latter sample. Both of the incised dichrome types in this sample are also found in the Southeastern Petén (Laporte, pers. comm. 2006).

***Intraregional comparisons:*** This group is most commonly found in the San Francisco Hills, although two simple dichrome types, Velerio Dichrome:Mateo Red and Cream and Hechizo Dichrome:Hechizo, were also found in Tres Islas. A single Chimuelo Dichrome:ND/black interior sherd was found in the Candelaria system.

**Observation:** Interior smudging is a popular mode in the northern highlands and in this transitional zone in later periods, but it is unclear if these dichromes have a black interior because of local, highland-influenced tastes or because they are part of greater lowland trends.

*Negative Decoration Group* (2 sherds, 1% of the Yitoqil sample)

Boo Incised:Boo

**Ware:** Paso Caballo Waxy

**Complex:** Chicanel

**Sample:** 2 rim sherds, both of which were subject to more detailed analysis.

**Principal identifying modes:** 1) A bowl with 2) simple negative designs, and 3) incisions; 4) red paste with quartz temper.

**Paste:** The paste is a deep red (7.5R4/6 or 10R6/6) with a fine quartz temper, ferruginous inclusions, and, in one case, a thin dark nucleus.

**Slip:** The slip which covers the majority of the vessel is red (10R6/8) in one case, orange (2.5YR5/8) in the other. In both cases a cream underslip was placed first, which shows through in patches as a result of the resist technique.

**Form:**

1) A sloping-walled bowl with a 27 cm diameter, a lip with an interior bevel, and a wall thickness of 7.4 mm. While the form is more typically Early Classic, the pot in all other aspects conforms to Late Preclassic standards, so the sherd was typed to the earlier variety.

2) A general bowl or plate form with an 18 cm diameter and a 5.1 mm wall thickness.

**Type:variety Designation:** One of the two sherds in this sample can be placed in a pre-established type—Boo Incised—which was originally considered to be part of the Sierra group (Culbert n.d.). Laporte and Corzo (2002:513) have since established a “Negative Decoration group in the southeastern Petén:

Boo Incised:Boo (Culbert n.d.)—1 sherd

Unnamed Resist-Incised (established here)—1 sherd

**Decoration:** Designs of the vessels appears to have been created by making the negative imagery expose the actual wall. There are simple geometric post-firing incisions in the form of simple lines. .

**Interregional comparisons:** This group is extremely rare in the Maya lowlands, only having been found in two sites previous to this study, Tikal (Culbert n.d.) and the Southeastern Petén (Laporte *et al.* 1993:72-3).

Boo Incised is only found in Tikal (Culbert n.d.), the southeastern Petén (Laporte *et al.* 1993:72), and the region presently under study. In the former, plates are the dominant form and decoration consists of simple shapes in resist and simple, incised lines. In the latter region, a cup and a bowl were found, and the decorations were equally simple. At Tikal, the type was dated to a later time period than here, since it was found in a transitional Mamom-Chicanel context (Tzek).

**Intraregional comparisons:** Both sherds were found in caves—the Boo Incised sherd in the San Francisco Hills and the other in the Candelaria system.



***Cahabon Flakey Ware***

*Borrayo Group* (less than 1% of the Yitoqil sample)

***Ware:*** Cahabon Flakey

***Complex:*** Carcha

***Sample:*** 1 body sherd

***Principal identifying modes:*** 1) A streaky, waxy orange slip on the exterior of 2) a probable jar form; 3) light red paste with sand temper.

***Paste:*** The paste is a light red (10R7/8) with medium sand temper and charcoal inclusions.

***Slip:*** A streaky, thin, waxy orange slip (5YR6/8) was painted on the exterior of the vessel.

***Forms:*** A probable jar with a wall thickness of 7.5 mm.

***Type:variety Designation:*** This sherd was classified as a pre-established group:

Borrayo Orange:Borrayo (Arnauld 1986:320)

***Decoration:*** The sherd is undecorated.

***Interregional comparisons:*** See description for Baclam Orange:Baclam above.

***Intraregional comparisons:*** cave in the eastern part of the San Francisco Hills (CHO-5-2).

***Observation:*** I was unable to compare this sherd to a sample from the original collection, so the type designation is based on Arnauld's description and not on direct comparison.

## V. Puj Complex (150-250 A.D.)

Within the Yitoqil sample, a small amount of material can be separated that obviously dates to the end of the phase, based primarily on surface treatment and form. The Terminal Preclassic period is in general difficult to classify for archaeologists, as it is a period of innovation in which new technologies and techniques were introduced and used alongside more traditional ones (Brady, Ball, *et al.* 1998). The lack of secure stratigraphy has prevented a more complete study of this phase, but the material that has been identified will be described below.

Puj is significant because it is the first occurrence of material in the southernmost part of the region, the cave of Hun Nal Ye. There is material coming from the rest of the region as well, but again mostly in ritual contexts.

The most common form is a short-necked jar, which is either simple (44%) or with four handles (8%) around the rim. Deep bowls are also common (32%), as are cups with either flaring (8%) or straight (4%) walls. Part of a shoe pot was also found (4%).

Almost the entire sample has some form of decoration—bichrome (60%), incised (4%), impressed (4%), or punctated (4%), with the rest of the sample (29%) being undecorated.

### **Monochromes**

#### ***Paso Caballo Waxy Ware***

*Boxcay Group* (4% of the Puj sample)

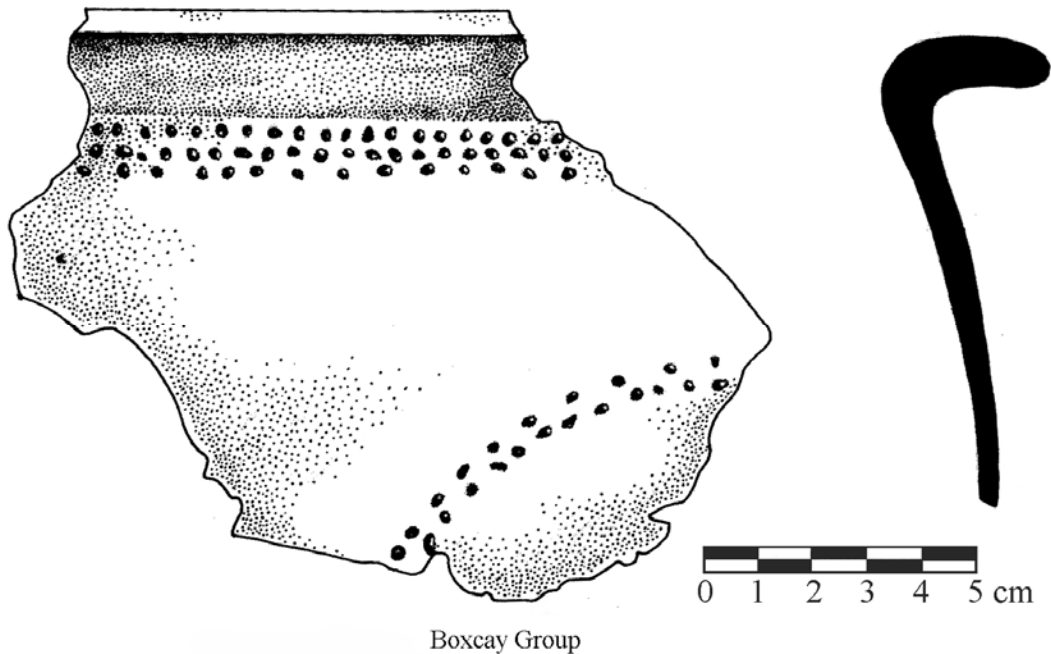
**Ware:** Paso Caballo Waxy

**Complex:** Chicanel

**Sample:** 1 rim-to-body sherd

**Principal identifying modes:** 1) A shoe pot with 2) a light brown slip and 3) simple punctuations under the neck and on the pot's "toe," 4) red paste with calcite temper.

**Paste:** The paste is red (10R6/6) with a medium calcite temper, red ferruginous inclusions, and a thin dark nucleus.



**Figure 5-27: Boxcay Group, Kape Punctated:Kape**

**Surface treatment:** The vessel was slipped a slightly waxy light brown (5YR6/6) on the exterior and the interior to the base of the neck.

**Form:** A shoe pot with a 24 cm diameter and a 2.9 cm tall neck that has a fluid curve from the body. The wall thickness is 8.8 mm.

**Type:variety Designation:** This sherd does not correspond to any pre-established type, so has been given a new designation here:

Kape Punctated:Kape (figure 5-27)

**Decoration: Punctations:** Simple designs were made using punctations—a set of concentric circles around the shoulder of the shoe-pot and its “toe.”

**Interregional comparisons:** This type is only found here. For a description of punctated sherds, see Lagartos Punctated:Lagartos above. This sherd is, however, slightly later, as the form is typical of Protoclassic subcomplexes throughout the lowlands.

**Intraregional comparisons:** This sherd was found in the entrance to a cave in the San Francisco Hills (Cueva de los Murciélagos, CBA-1-1).

**Observation:** Unlike earlier examples in this group, this sherd does seem to be intentionally slipped brown. Because the vessel form is diagnostic of the Terminal Preclassic, it was treated separately from the other examples from the Boxcay group.

### ***Peten Glossy Ware***

**Iberia Group** (18% of the Puj sample)

**Ware:** Petén Glossy

**Complex:** Protoclassic

**Sample:** 5 body sherds, 4 of which were subject to a more detailed analysis.

**Principal identifying modes:** 1) A jar with 2) an orange slip over a cream underslip, 3) orange paste with sand and/or quartz temper.

**Paste:** The paste is a light, reddish orange (2.5YR6/4 to 7/6) with sand, quartz, or a medium sand and quartz mix for the temper and red ferruginous inclusions.

**Slip:** A thick, slightly waxy reddish (2.5YR6/4 or 6/6) or yellowish (7.5YR5/8) orange slip was applied onto the surface or, occasionally, over a cream underslip. All of the sherds were slipped only on the exterior.

**Form:** A general jar form with a wall thickness of 4.9 mm (3.7-8.1 mm).

**Type-variety Designation:** These sherds represent an early experiment with glossier slips and are difficult to place in a specific group with certainty, something made even more difficult by the lack of anything but body sherds in the sample. I have chosen to use Iberia because the description most closely matches the present sample, and because it was established at a nearby site, Seibal, with already-established links to the region presently under study.

Iberia Orange:Iberia (Sabloff 1975:90)

**Decoration:** These sherds are all undecorated.

**Interregional comparisons:** This type has been found in several other parts of the Maya lowlands—Seibal (Sabloff 1975:90-4), El Mirador (Forsyth 1989:53-5), the Petexbatun (Foias 1996:328-31), and Holmul (Callaghan 2006). Jar forms are rare but present in the Seibal collection but absent everywhere else, where the sample consists of plates and bowls.

There are variations in slip texture—both waxy and glossy varieties exist, but they are normally somewhere between the two and the type appears to be transitional between Paso Caballo Waxy and Petén Glossy, an experimentation with glossier, finer slip. This has led to classification into different wares—Sabloff originally classified it as Paso Caballo Waxy, but Forsyth moved it into Petén Glossy (and into the Águila Group). Foias continued with Sabloff's designation, but I have followed Forsyth and use it as a marker for the beginning of Petén Glossy. It is slightly earlier than Águila Orange:Águila (see below), but likely overlapped. Brady (1989:174-8) found two well-

defined types in Naj Tunich, Aguacate Orange and La Compuerta Orange; the latter is closer to the present sample.

For comparison with highland types, see the description for Baclam Orange:Baclam above. Tupal Orange (Ichon and Arnauld 1985:135-41) at La Lagunita has a similar surface treatment. Different varieties of Aguacate Orange were identified in El Salvador at Chalchuapa (Sharer 1978:42-3) and Santa Leticia (Demarest 1986:131); Demarest proposed that they be given a separate type designation, Atecozol, to avoid confusion with the lowland material.

***Intraregional comparisons:*** These sherds are found in the central part of the region under study, in caves in the Candelaria system and the eastern part of the San Francisco Hills.

### ***Cahabon Flakey Ware***

*Cachil Group* (11% of the Puj sample)

***Ware:*** Cahabon Flakey

***Complex:*** Quej

***Sample:*** 1 partial vessel and 2 whole vessels

***Principal identifying modes:*** 1) 4-handled, short-necked jars with 2) a smoothed exterior and 3) red, finger-painted decoration; 4) volcanic temper.

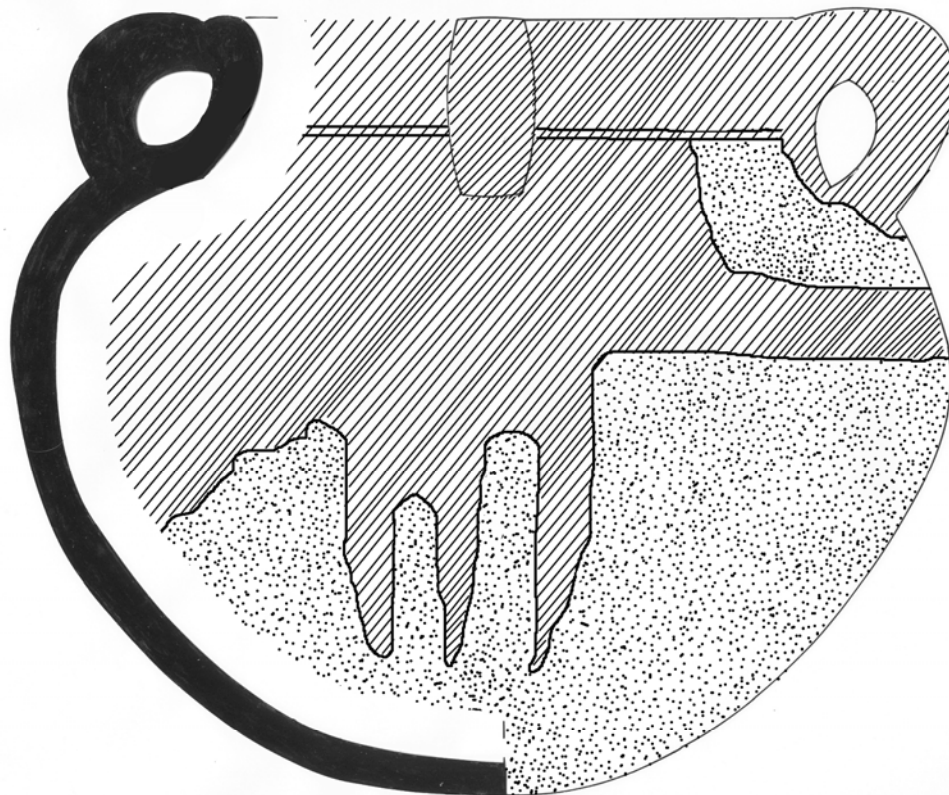
***Paste:*** The paste has volcanic temper with pumice inclusions.

***Slip:*** The surface is smoothed and possibly auto-slipped on the body, and the neck is slipped red.

**Forms:** A short-necked jar standing 17 cm tall with a diameter of 12.9 cm. The neck is 2.6 cm tall, and there are 2 parallel circumferential incisions at the neck-body juncture. There are 4 handles present connecting the neck to the body that are 2.7 cm tall and 1.4 cm wide. The wall thickness is 10 mm.

**Type:variety Designation:** This sample has been typed to a pre-existing classification:

Cachil Red-on-Buff:Cachil (Sharer and Sedat 1987:288)—1 whole vessel (figure 5-28) and one partial vessel



0 1 2 3 4 5 cm.

Cachil Red-on-Buff

**Figure 5- 28: Cachil Group, Cachil Red-on-Buff:Cachil**

**Decoration:** Simple geometric designs are also done in red coming down from the neck, including 3 finger-swipes.

**Interregional comparisons:** This type is wide-spread through the northern and central highlands. This type was first identified in the Salama Valley (Sharer and Sedat 1987:288), where this type likely originated (Hatch, pers. comm. 2006). It has also been found in the Motagua Valley (mostly in the department of El Progreso, Hatch 1997:137), in small quantities in the Valley of Guatemala (Ibid.), at Los Encuentros (Ichon and Hatch 1980:97-106), and at La Lagunita (Ichon and Arnauld 1985:112, R. Viel 1984:60). It has been identified at Kaminaljuyu as Corinto Daub (ibid.) or Arenal Matte:Purple (Wetherington 1978:74). The paste is fine and normally beige or tan (the same color as the surface) with designs either in red (in the Salama Valley) or purplish-red (at Kaminaljuyu). In the Salama Valley, there are three small chamfers at the neck-body juncture, which is the only thing that distinguishes their sample from the present one.

The red-on-buff tradition in the highlands goes beyond this type, however. Guaymango Red-on-Buff (Sharer 1978:27-8, Demarest 1986:117-24, Sharer and Sedat 1987a:283-4) is similar in execution, with red wash or slip atop a smooth buff surface. The forms are normally restricted to jars as well, but the jars have a more restricted neck and handles further down on the body. There are also commonly incisions or punctations on the surface of the vessels. Sacatepequez Polished Red on Unpolished Buff Ware (Ichon and Hatch 1980) and Embudo Buff Ware (Wetherington 1978:72-3) are also related.

**Intraregional comparisons:** Both the whole and the incomplete vessel come from the southern part of the region under study, Hun Nal Ye.



**Observation:** This group and type (categorized as the *Corinto Daub* ware by Marion Hatch) has a broad reach both chronologically and geographically. I have dated these vessels to the Terminal Preclassic as there are several Usulután-esque whole vessels (see Witz Group below) found associated with them. In addition, the Protoclassic Form C of Corinto Daub identified by Hatch (1980:103) at Los Encuentros is nearly identical to the present sample.

*Nogaro Group* (7% of the Puj sample)

**Ware:** Cahabon Flakey

**Complex:** Puj

**Sample:** 2 whole vessels

**Principal identifying modes:** 1) A jar with 2) a smooth brown slip and 3) much fireclouding.

**Paste:** Unknown (whole vessel).

**Surface:** The surface is a smooth, glossy brown that fades to black in many sections.

**Forms:** 1) One (HNY-V4) is a jar with a roughly-made lip and neck, a globular body, and a flat base. The diameter is 14 cm, the height is 19 cm, and the neck height is 3.4 cm.  
2) The second (HNY-V5) is a miniature jar with a short neck (1.6 cm), a wide mouth (14 cm), and a convex base that stands 12.3 cm.

**Type:variety Designation:** These vessels fit within the range established in La Lagunita (Viel 1984:72) for the Nogaro group, which included both a brown and a black type.

Nogaro Brown:Nogaro (R. Viel 1984:72)

**Decoration:** These vessels are both undecorated.

***Interregional comparisons:*** See description for Boxcay Brown and Polvero Black above. At La Lagunita (R. Viel 1984:72-6, Ichon and Arnauld 121-30), jars are present but rare. Most of the forms are bowls or cylinders.

***Intraregional comparisons:*** Both of these vessels are from the southernmost part of the area under study, Hun Nal Ye.

***Observation:*** This type was identified through comparison with the La Lagunita monographs, not with direct comparison between sherds.

### ***Unknown Ware***

*Witz Group* (14% of the Puj sample)

***Ware:*** Unknown

***Complex:*** Puj

***Sample:*** 4 whole vessels

***Principal identifying modes:*** 1) A flaring-walled cup with 2) a smooth orange slip.

***Paste:*** Unknown (whole vessel).

***Surface treatment:*** The surface is a smooth, dull orange.

### ***Form:***

1) A cylinder with an out-curving rim separated from the body by a slight chamfer and a rounded lip. The vessel is 12.5 cm tall and has a diameter of 15.2 cm.

The vessel is slipped on both the interior and the exterior to the flat base.

2) A “florero” with slightly bulging walls, an everted lip, and a slightly convex base. The height is 11.5 cm, and the diameter is 17.8 cm.

3) A very squat jar with a short, wide mouth and an angle at the neck-body juncture. The diameter is 13 cm, the height is 16 cm, and the height of the neck is 3.4 cm. The vessel has a coke-bottle base and a rounded, slightly flaring lip.

4) A cup with a slightly rounded body, a flat base, and a slightly flaring wall with an interior-beveled lip. The diameter is 13.9 cm, and the height is 14.7 cm. The base is flat.

**Type:variety Designation:** None of these vessels quite “fit” into any pre-established group, and each of the vessels corresponds to a different type, all of which are defined here.

Witz Orange:Witz—1 whole vessel (figure 5-29 a)

Cascadas Incised:Cascadas—1 whole vessel (figure 5-29 b)

Sage Impressed:Sage—1 whole vessel (figure 5-30 a)

Mariel Black-on-Orange:Mariel—1 whole vessel (figure 5-30 b)

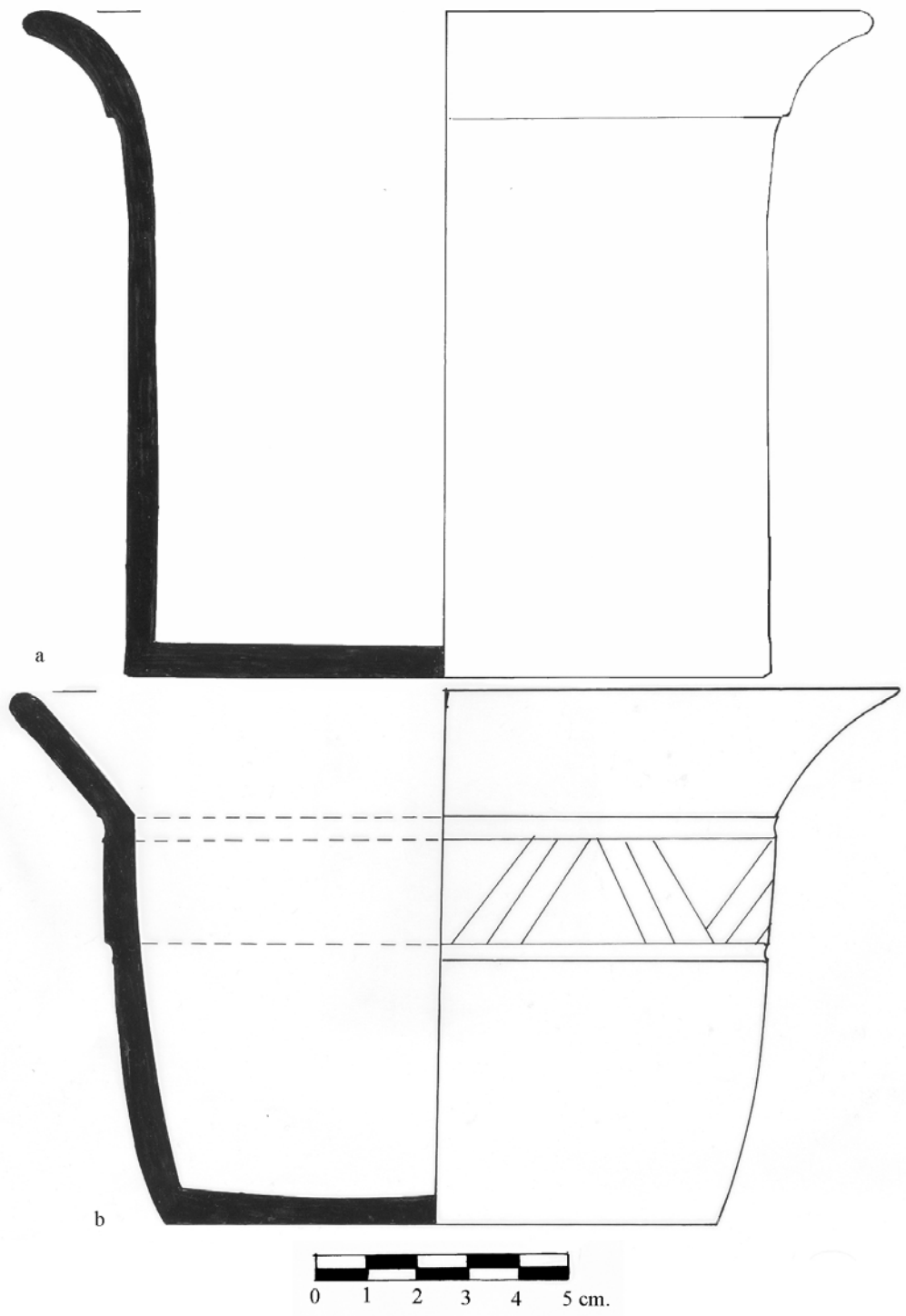
**Decoration:**

1) *Plain:* One of the vessels, a cylinder, is without any decoration.

2) *Incised:* A slightly elevated ridge with two circumferential lines is found just beneath the everted rim on the *florero*. Between these lines are triangles formed by groups of 3 incised lines between them.

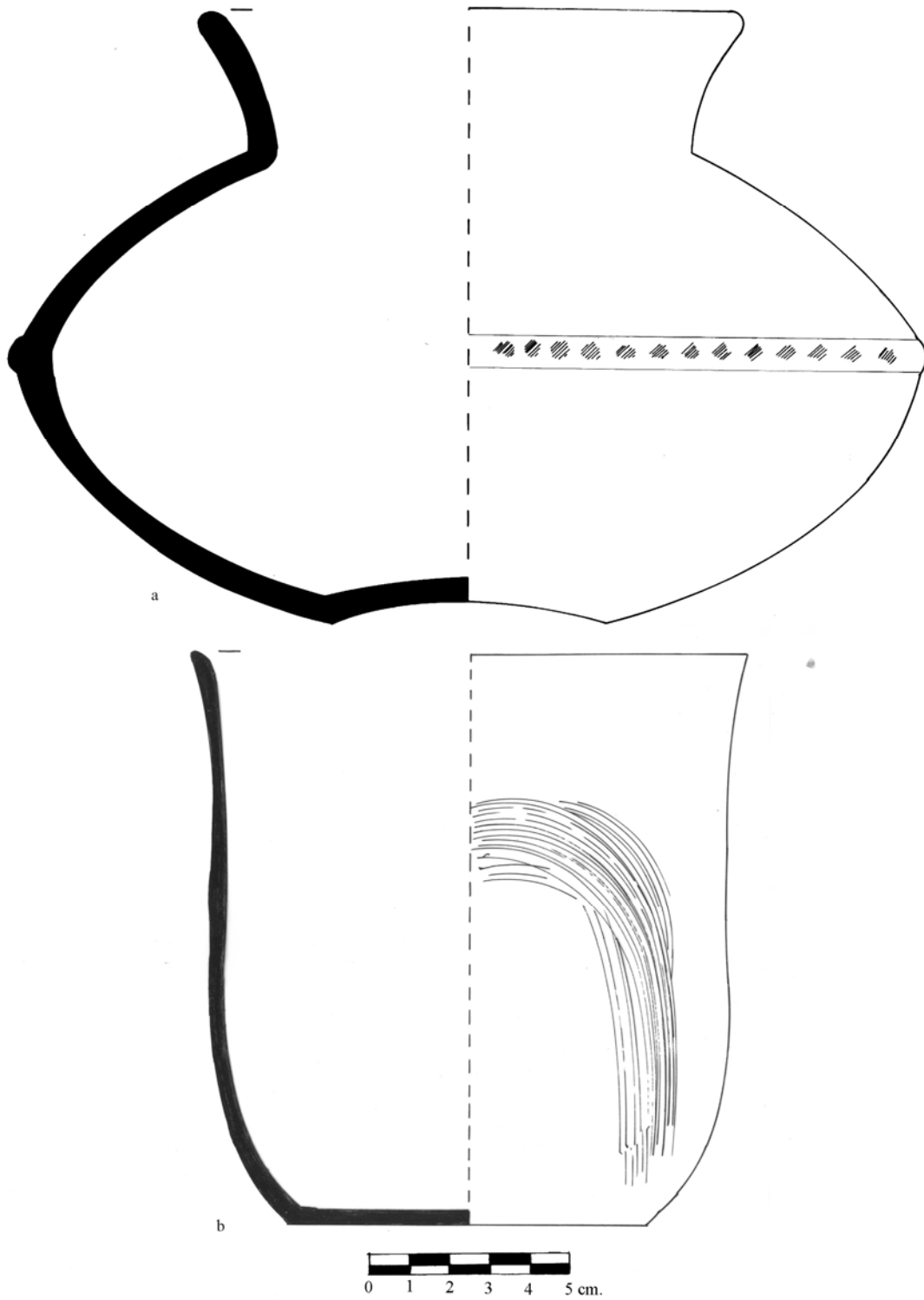
3) *Impressed:* At the widest part of the body of the jar, a small ridge was molded with a line of small, circular impressions in its center.

4) *Bichrome:* Three arcs were painted onto the body of a cup in black, and the individual brush-strokes are all visible.



Witz Group

Figure 5- 29: Witz Group, a) Witz Orange:Witz, b) Cascadas Incised:Cascadas



Witz Group

Figure 5- 30: Witz Group, a) Saqe Impressed:Saqe, b) Mariel Black-on-Orange:Mariel

***Intraregional comparisons:*** All four vessels were found in the southernmost part of the system, in Hun Nal Ye.

***Interregional comparisons:*** This group appears to be most related to the southeastern highlands (Demarest, pers. comm. 2005). While the standard Late Preclassic orange-slipped group, Otocuitla (see description for Baclam above), continued through the end of the Late Preclassic, others were developed that had primarily Usulután decoration. Jicalapa Orange-on-Cream (Sharer 1978:30-1, Demarest 1986:88-106) had a very thick cream underslip atop which a very light orange slip or wash was placed. Izalco Orange (Sharer 1978:39-40, Demarest 1986:129-31) is much more polished and hard-fired, and greatly resembles the present sample in surface finish although not so much in form; Jicalapa is much closer.

Some examples of Arenate Ware at Kaminaljuyu (Hatch 1997:130-2), which sometimes also has an orange slip, are identical in form. An unidentified “Brown-Black, Thick-Incised Cup” (ibid.:148) was also found at Kaminaljuyu with a similar form. Vessels in this ware are incised (often in restricted areas near the lip), which makes them more closely related to Cascadas Incised:Cascadas (see below).

There is no specific correlate in the highlands to the bichrome, as black-on-orange is not a common decoration.

## **Bichromes and Trichromes**

### ***Paso Caballo Ware***

*Caramba Group* (18% of the Puj sample)

***Ware:*** Paso Caballo Waxy

**Complex:** Chicanel

**Sample:** 5 body sherds, all of which were subjected to a more detailed analysis.

**Principal identifying modes:** 1) A jar with 2) fields of red and orange on the exterior of the vessel, 3) reddish orange paste with calcite or quartz temper.

**Paste:** The paste is red (10R6/6) or a reddish orange (2.5YR6/4 or 7/4) with fine calcite, medium to coarse quartz, or grog temper, with either pebble or ferruginous inclusions.

One of the examples has a dark nucleus.

**Slip:** The primary slip is orange (2.5YR6/8) and burnished, leaving it smooth and waxy with a high sheen.

**Form:** A general jar form with a 6.4 mm wall thickness (5.6-6.3 mm).

**Type:variety Designation:** While the Caramba type was established by Adams (1971:28), Forsyth (1989) established Caramba as a group. Only one of the types used in this analysis has been pre-established; the second is established here.

Sacluc Black and Orange:Sacluc (Adams 1971:28)—3 sherds

Unnamed Orange and Red—2 sherds

**Decoration:**

1) *Simple Bichrome:* Unlike regular Caramba Red and Orange:Caramba, this sherd is somewhere between a true bichrome and a representative of the “differentiated color” group, with large fields of red (10R5/8) and orange (2.5YR6/8). Because of the waxy slip and the general color scheme, I have placed it into the Caramba group. At the recommendation of Donald Forsyth (pers. comm., 2006) I have given it its own type designation.

2) *Complex Bichrome*: Simple geometric motifs were painted over the slip in black.

***Intraregional comparisons***: Unlike most other Preclassic lowland groups, the San Francisco Hills have relatively few examples of Caramba, and it is limited exclusively to the part of the Unnamed Red-on-Orange. This sample comes from ceremonial areas in the northern  $\frac{3}{4}$  of the region—the Candelaria Caves and the San Francisco Hills, and Tres Islas

***Interregional comparisons***: This is a fairly widespread group, with Sacluc Black-on-Orange appearing in the Petexbatun (Foiás 1996:332-4), Seibal (Sabloff 1975:88-9), Altar de Sacrificios (Adams 1971:28), Tikal (Culbert, n.d.), La Joyanca (Forné 2005:417-9), and El Mirador (Forsyth 1989:55-7). A different variety of Sacluc is found in the southeastern Petén (Laporte, comm. pers. 2006) with a red primary slip.

In all of the regions, plates are the dominant or exclusive form, although at Tikal, where the sample was classified into the variety Sis, jars are common. A cream underslip is present only in El Mirador. The wall thickness is between 4 and 8 cm in Altar and between 6 and 8 cm in the Petexbatun.

The paste is normally calcite, although at Altar it appears to have been tuff, for which Adams suggests that it was an import from the highlands. In the Petexbatun, the lip has an interior bevel and is between 20 and 25 cm in diameter. One interesting example from La Lagunita (Ichon and Arnauld 1985:157) is a wide bowl (43 cm diameter) with porous paste, reminiscent of Late Classic Cebada Porous and Imitation Saxche-Palmar (see below).



An earlier type, Repasto Black-on-Red, was identified in the sample from Barton Ramie (Gifford 1975:92), with simple geometric designs in black over a standard Sierra Red slip. Like the present sample, the vessel walls are thinner, between 6 and 7 mm. The same type was found in Tikal (Culbert n.d.) but limited to the Chuen complex. Other related types are found in Seibal, where there are red lines on either the interior or exterior and black lines on the other side. Since the black often fades to red at Altar, it is possible that this is due to firing.

Two related types were found in the collection at Salinas de los Nueve Cerros: Anumja Black-on-Red and Yaalcab Brown-on-Orange (Dillon 1979:102-4). The vessels are bowls with incurving walls in the former and Z-angled bowls in the latter with positive Usulután-style decoration in black or brown (although Dillon posits that the brown was intended to be black).

Trichromes similar to Sacluc are present in Tikal and Altar de Sacrificios. They have a zoned red slip in addition to black and orange (Metapa Trichrome, see description in chapter 6).

The major difference between Sacluc Black-on-Orange and Gavilan Black-on-Orange is the texture of the slip, which is a true glossy slip (see description below). The decoration moves beyond simple rows of wavy lines, however.

The potters were obviously imitating Usulután decoration, which exist throughout the central and southeastern highlands. There is one significant difference—the designs are in black slip instead of resist.

This type has a surface treatment very similar to that of Caramba and Sacluc (see comparisons for Sacluc Black and Orange:Sacluc below). Zoned dichromes are rare in the rest of the Maya world, and none have these colors, so little comparison can be made.

**Observation:** Like Iberia, there is a debate concerning which ware this group belongs to, as it is not as waxy as most of the other contemporaneous types. I have placed it in Paso Caballo Waxy (following all but Culbert [n.d.] and Forsyth [1989:55]), since it continues into the Early Classic and never loses its waxy texture. Although I have placed this type into the Caramba Group (following Laporte, pers. comm. 2006), it is normally given its own group or, in the case of Forsyth, into Águila Group.

***Petén Glossy Ware***

*Ixcanrío Group* (29% of the Puj sample)

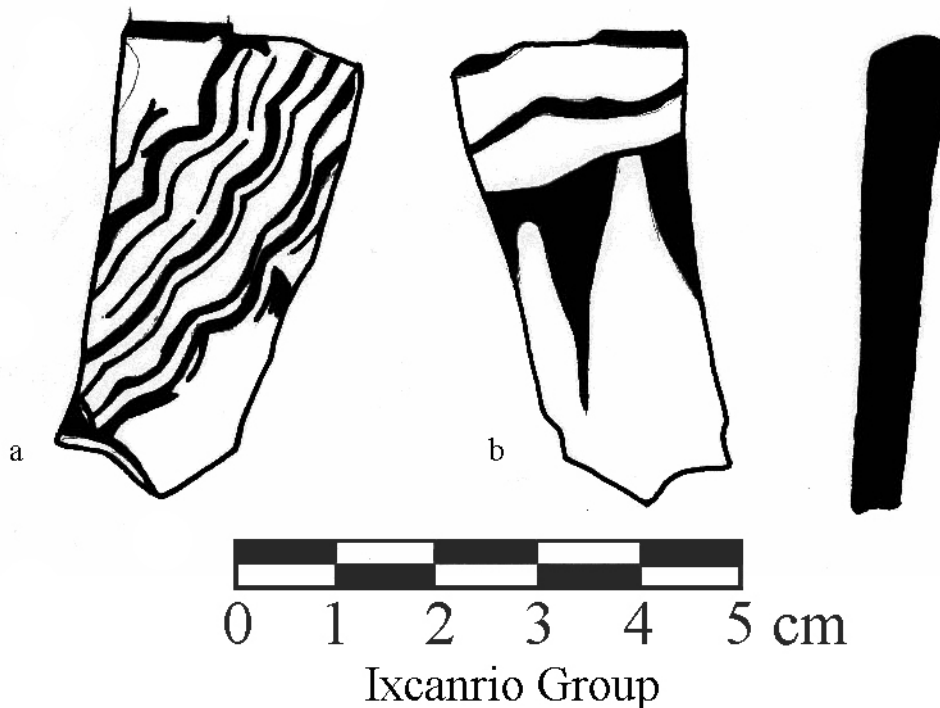


Figure 5- 31: Ixcanrío Group: Gavilán Black-on-Orange:Salsipuede

**Ware:** Petén Glossy

**Complex:** Protoclassic

**Sample:** 8 sherds, 4 of which were subject to a more detailed analysis. The sample breaks down into 5 bases, 1 body, and an ovoid foot.

**Principal identifying modes:** 1) A deep bowl with mammiform or ovoid supports; 2) a light orange slip with 3) scalloped black, wavy lines decorating the interior; 4) orangish paste with quartz temper.

**Paste:** The paste is orangish (2.5YR7/4, 5YR7/4, 8/4) with a temper composed of fine quartz or a mixture of medium-sized grains of quartz and calcite. All examples have ferruginous lump inclusions.

**Slip:** The light orange slip (2.5YR6/8, 5YR5/8) was placed over a cream underslip in one of the examples. One of the sherds was slipped only on the exterior, while the others were slipped on both sides with the exception of the exterior base.

**Form:** A deep bowl with inclined walls and a flat base. A large support scar, probably from a mammiform foot, is located on the base of one vessel, while another had ovoid feet. The wall thickness is 6.5 mm (4.3-8.8 mm).

**Type:variety Designation:** This sherd (figure 5-31) belongs to a common type, Gavilan Black-on-Orange (Gifford 1976:140), although the variety matches the more local Salsipuede (Adams 1971:29), established at Altar de Sacrificios.

**Decoration: Bichrome:** "Scalloped" black, wavy lines or simple geometric patterns were painted on the exterior of the vessel to the base over the orange slip.

**Intraregional comparisons:** All of the sample comes from the same cave in the eastern part of the San Francisco Hills.

***Interregional comparisons:*** At Altar de Sacrificios (Adams 1971:29), the decoration consists of parallel black, wavy lines on the rims and area edges. The paste is calcite temper. Adams also discusses a related type that he found in San Bartolomé, Quiche, that had similar designs and plate forms but were locally produced.

In Naj Tunich, Brady (1989:177) found examples of this type consisting of incurving bowls and flaring-walled bowls with mammiform feet. At Barton Ramie (Gifford 1975:140-3), plates and bowls are the dominant form, normally with nubbin supports, and a thickness between 5 and 9 cm. The diameter is between 17 and 38 cm.

For a description of related highland types, see the discussion of Sacluc Black-on-Orange above.

## **V. Conclusions**

Because of the lack of pure Preclassic contexts and the paltry amount of material recovered in these phases, it is exceedingly difficult to characterize the Preclassic in this area. However, there are several general patterns that can be teased from the data, which should be tested in future investigations.

### *1) Interregional links*

The fact that the earliest ceramics appear to have shared traits with material from the Salamá Valley and the Lower Pasión makes it likely that the potters were, directly or indirectly, in communication with people from both zones (figure 5-32). If this is the case, it would appear that the Classic period trade route was in use long before the

founding of major settlements along the river, although given the small amount of material evidence it is unlikely that it was the main route.

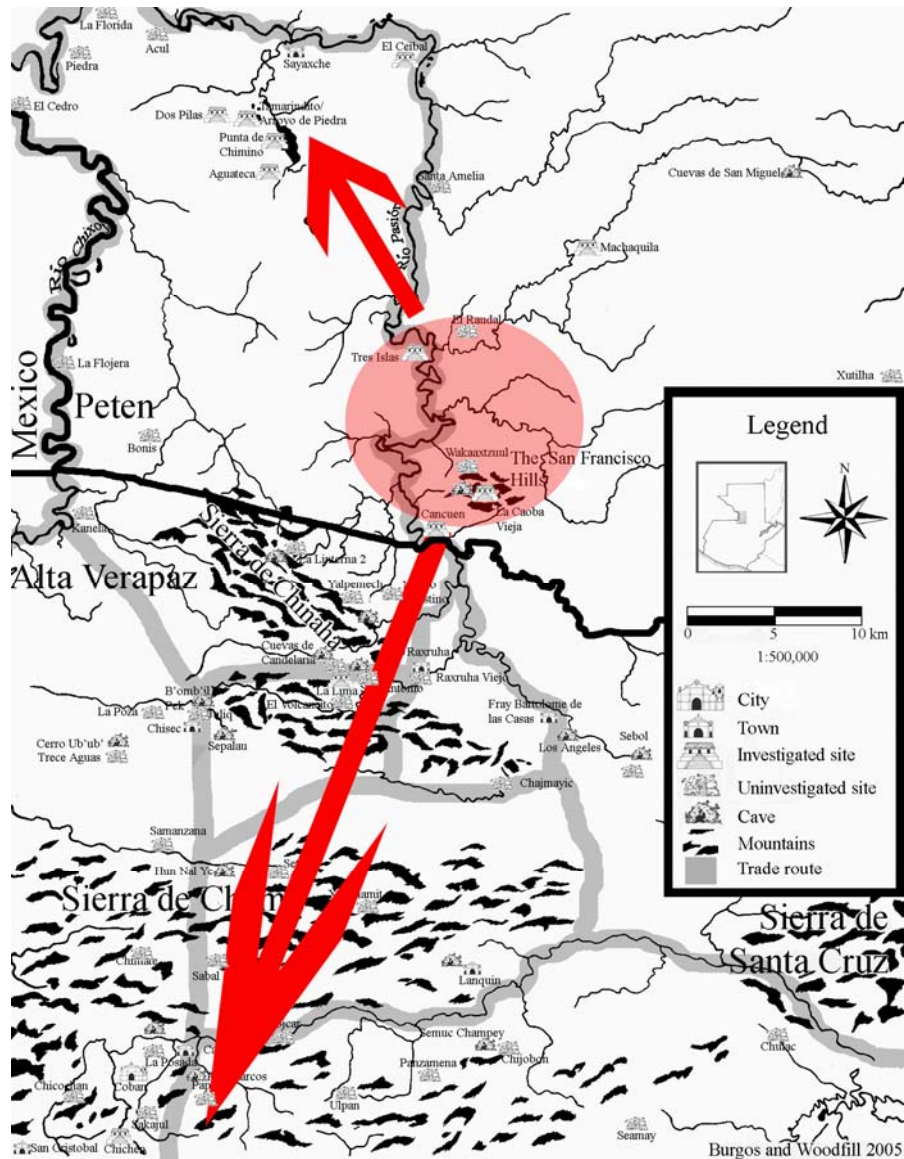


Figure 5- 32: Location of Middle Preclassic Ceramics and Regional Affiliations

E Wyllys Andrews V (1990:9) pointed to this region as a potential communication route during the Middle Preclassic and the potential *entrada* for the so-called “Xe intrusion.” While it is debatable if the introduction of ceramics into the

lowlands is indeed caused by a simultaneous influx of potters<sup>2</sup>, the earliest ceramics in the southern lowlands were ultimately derived from highland traditions. Finding contemporaneous ceramics that could be transitional between Xe and the highlands gives credence to Andrew’s assertion and should be researched further.

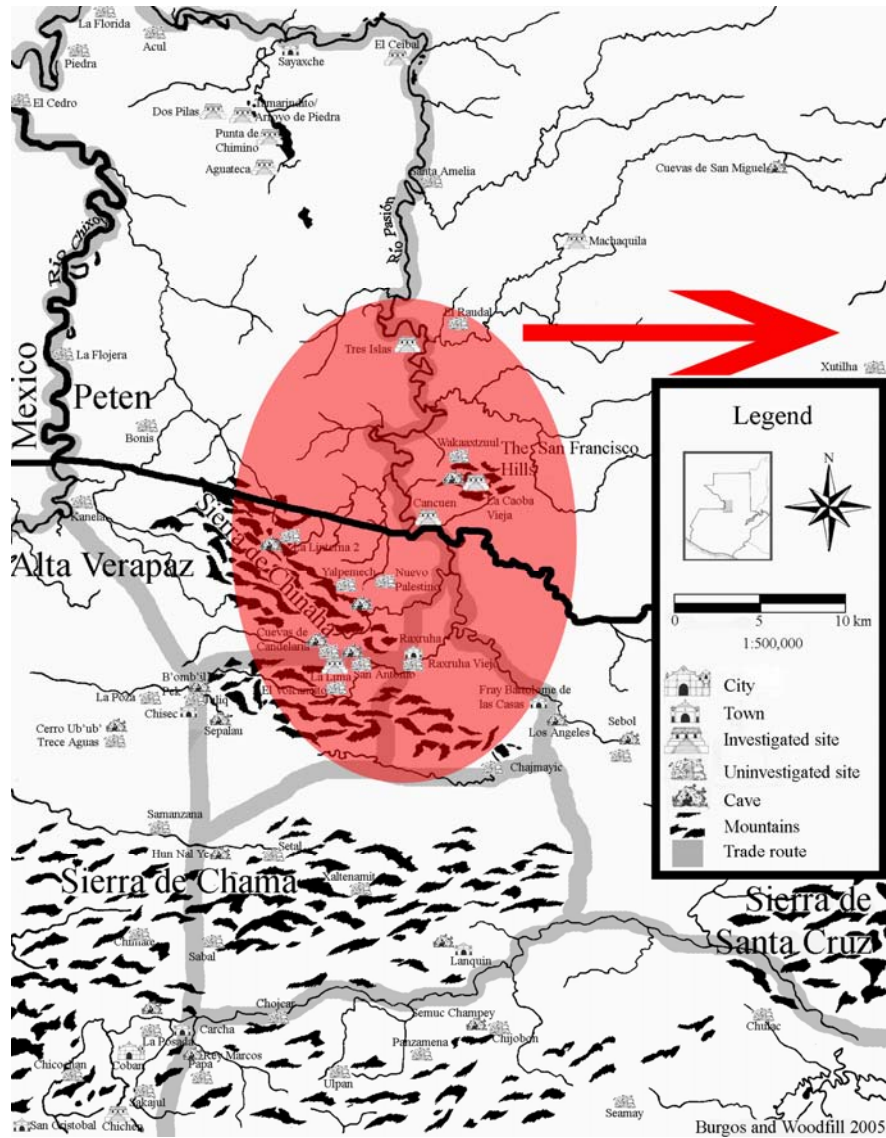


Figure 5- 33: Location of Late Preclassic Ceramics and Regional Affiliations

<sup>2</sup> It is true that there is very little evidence of Lowland population in the Early Preclassic, but since most of what archaeologists use to date materials is ceramics (which are often the only thing to survive in the tropical Lowland environment) and since so much of the Lowlands is awaiting investigation, I believe that it is hasty to presume a massive population influx at this time.

While Middle Preclassic ceramics show a mixing of highland and lowland traits (figure 5-32), the region becomes strongly associated with the southeastern Petén during the Late Preclassic (figure 5-33). In fact, only a single sherd from the highlands has been found, while the majority of material shows ties from the Candelaria Caves and Raxruha up-river to Tres Islas. By the Terminal Preclassic, all of the region's shrines were in use, and it is during this time period that the first regional schism can be seen—while the sites in the northern  $\frac{3}{4}$  of the region under study continue to be lowland in nature, Hun Nal Ye begins to be used by northern highlanders.

## *2) Expanding zones of use or occupation*

The earliest ceramics are found in the San Francisco Hills, and while the area continues to dominate the Preclassic assemblage, adjacent zones begin to have evidence of use shortly thereafter. This pattern cannot be discussed with much certainty at this point, since the regional sampling program is still in its early stages.

While there is no hard evidence at present for local settlements until the Early Classic, circumstantial evidence strongly points to an early date for the settlement of La Caoba Vieja—the earliest materials are found in caves and rock shelters closest to the village and at the bottom of one of its aguadas. After the Oq' phase, other parts of the region slowly began to be used with more frequency, but until the Classic period, use was very limited, and was more likely the result of a transient population.

### *3) The ritual nature of the deposits*

With the exception of one sherd recovered in the La Caoba Vieja aguada, every Preclassic ceramic recovered was from a ritual site (or, in the case of Tres Islas, a place that was an important ritual site in later time periods), be it a cave or a hilltop shrine<sup>3</sup>. While all of these places were heavily used by travelers and merchants after the Preclassic, use is sporadic throughout the Preclassic, which means one of three things: the Preclassic travelers were not as concerned with ritual activity as they were in subsequent periods, that they used different shrines, or the region was not important as a thoroughfare until the Early Classic.

Throughout the Preclassic there is relatively little evidence of occupation or transit through this region. While much more investigation is needed to determine if the region was an important segment of the trade route during this period, it is probable that it is the Río Chixoy and not the Pasión along which materials from the highlands and Pacific coast traveled on their way to the Mirador Basin. In spite of rather humble beginnings, the region blossoms into an integral part of the Maya world system by the last decades of the Early Classic.

---

<sup>3</sup> Even the aguada likely had a ritual importance as it does today. Members of the Cancun Project witnessed a ceremony at the aguada for its re-commemoration in 2002.



## CHAPTER VI:

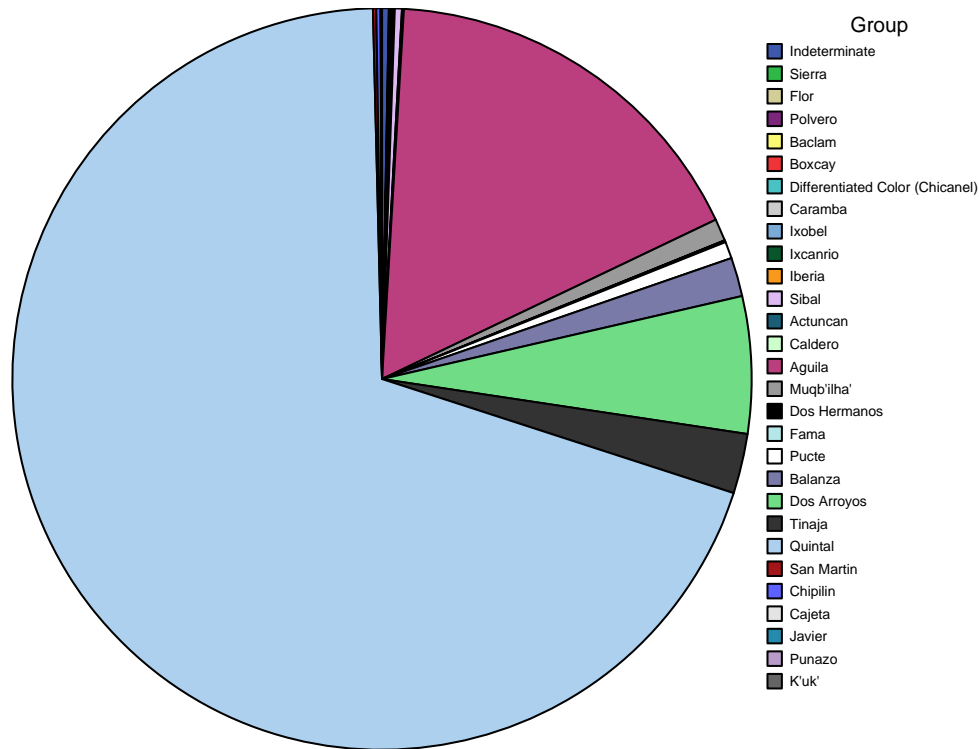
### THE EARLY CLASSIC: THE GOLDEN AGE OF SHRINE USE

#### **I. Introduction**

The Early Classic is the pinnacle of shrine use in the region, and the majority of the ceramic assemblage dates to this period. A total of 16,529 sherds and whole vessels date to this period, a full 50.4% of the entire sample. The period is much better understood than the Preclassic—in addition to the larger sample, for the first time there are many secure contexts. Like earlier time periods, however, there is little evidence of settlements dating to the Early Classic—98.9% of the assemblage come from caves, and most of the rest come from Tres Islas—a hilltop shrine, not a settlement. Only 27 sherds, in fact, can conceivably be attributed to Early Classic occupation zones, which amounts to 0.16% of the Pel assemblage.

Looking at the whole collection, there is a high degree of standardization—93.2% of the Early Classic assemblage belongs to the three most common groups: Quintal, Águila, and Dos Arroyos (figure 6-1). A full 35.5% of the entire assemblage (Early Middle Preclassic to Early Postclassic) belongs to the Quintal group. In spite of the overwhelming presence of these three types, there is a wide range of “foreign” types recovered in the region. Ixobel Orange, Diego Striated, Balanza Black:Discordia, San Martin Variegated Brown, Chipilin Red, and the continued presence of Chicanel through the end of the Early Classic are all indicators of interactions with disparate populations from the northern highlands to the central Petén and from Seibal to the Dolores Valley.

Certain forms, modes of decoration, and iconography in some of the more common types also indicate suggest these interactions.



**Figure 6- 1: Pel Groups by Sherd Count**

*Problems in the Early Classic Sample*

The fact that less than 1% of the Early Classic sample comes from settlements means that it is difficult to say anything about the local population with much certainty. That the overwhelming majority of the material in this investigation comes from shrines could be blamed on the research model—half of the time spent in the field was devoted to recovering cave material. However, there is very little material from the Early Classic recovered by any of the other subprojects or by research conducted at Cancuen.

The Early Classic period has proven problematic throughout the Maya lowlands, especially outside of the central Petén where the ceramic markers for the period were first

defined. Scholars (R. Adams 1971, Sabloff 1975, Holley 1983, Foias 1996, Forné 2005) noted that the Tzakol-sphere ceramics, so common around Tikal, were almost completely absent in other parts. This was especially problematic, since this apparent decline was preceded by a very large Late Preclassic population, as evinced by the quantity of Chicanel sherds present throughout the lowlands. After careful investigation in the southeastern Petén, Juan Pedro Laporte (1995b) presented convincing evidence that the problem was simply that Tzakol-sphere ceramics were often only found in specific, mostly ritual and elite contexts, and that many of the Late Preclassic types dominated the assemblage through the end of the Early Classic. He has been able to define many of the Early Classic varieties (Laporte *et al.* 1993, Laporte and Corzco 2002), but, in many cases, they are indistinguishable from those from the Late Preclassic.

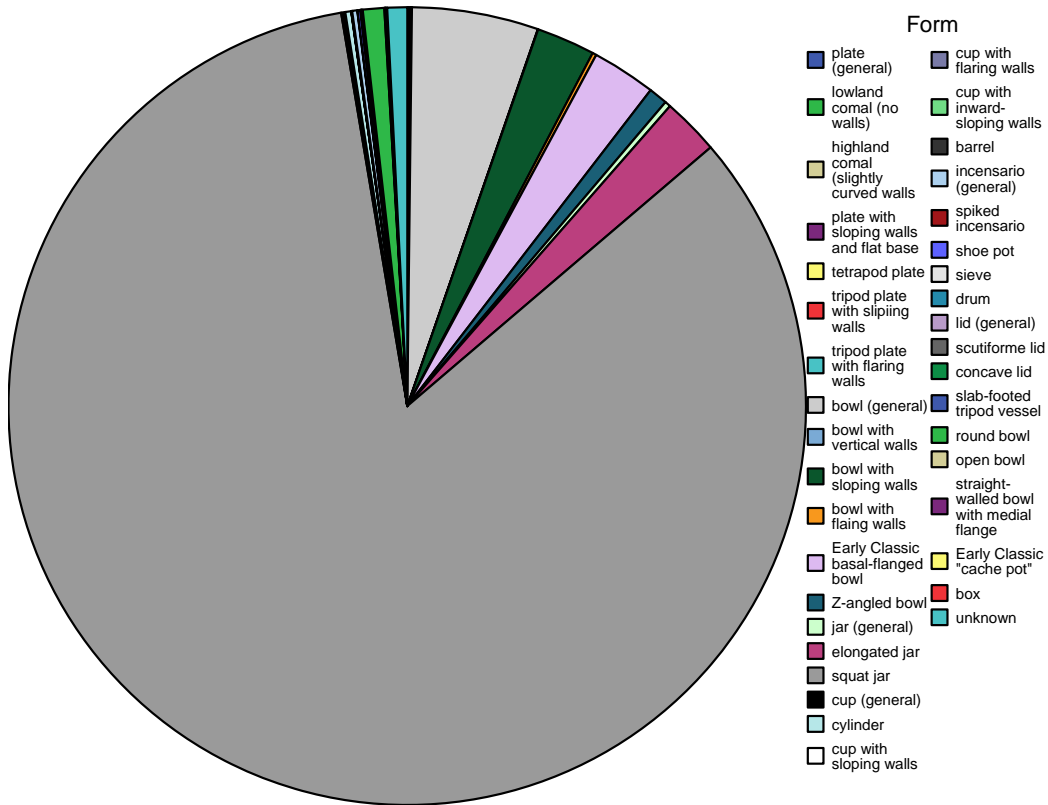
The same pattern has been found in many sites outside of the central Petén, and more comparative data will soon be available, but this research is still in its infancy. Because of this, there is a limited amount of data available, but as this problem becomes more widely addressed, this will be rectified.

#### *The Nature of the Sample*

The most common slip is red-orange (17.1%)—the Águila group covers most shades of orange and red, and, unlike other time periods, there is no real clustering of color around specific orange or red shades. It is possible to isolate an additional 4.3% of the sample as having a definitively orange slip, and 4.2% is definitively red. Black is occasionally used as the primary slip (2% of the sample) has a black primary slip, as is

brown (.9%). There is a very small amount of specular red, cream, white, and buff slip, and .1% of the collection is of an unknown slip color.

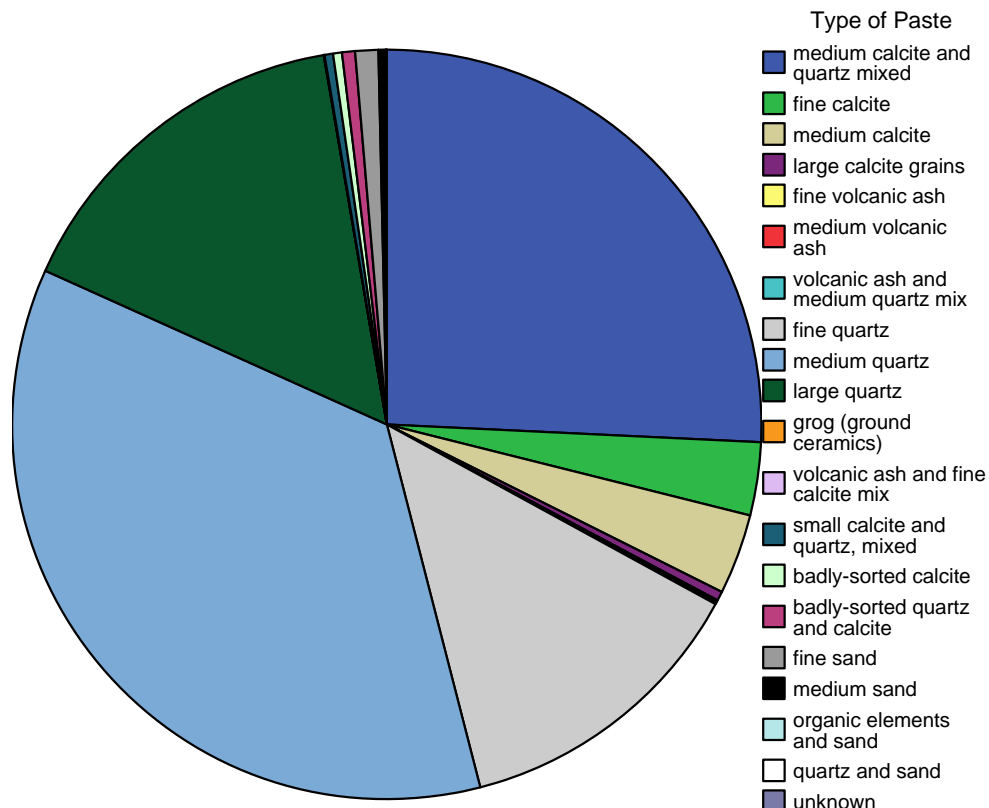
While most of the recovered materials are plain (87.4%), there is a wide range of decoration present. The most common is polychrome (4.0%), followed by striated (3.8%), washed (2.1%), incised (0.4%), appliquéd (.0.3%), and smudged (0.3%). Rarely a sherd will be fluted, grooved, impressed, bichrome, modeled, gouged and incised, plano-relief, chamfered, or dichrome (all 0.1% or less)



**Figure 6-2: Pel Ceramic Forms by Sherd Count**

The most common form (figure 6-2) is a squat jar (84.4%), followed by sloping-walled (2.4%) or basal flanged (2.4%) bowls, with other bowl forms comprising 6.9% of the sample. Plates, cylinders, cups, incensarios, and lids are rare but present.

The paste (figure 6-3) is variable within the sample, but most commonly has fine (32.3%), medium (27.9%) or large (7.0%) quartz temper. A mixture of calcite and quartz is the next most common temper (15%), followed by fine (7.6%), medium (5.0%), or large (0.8%) calcite and medium sand (0.6%). It is interesting to note that ash, while still rare, is more common than in previous periods (0.6%), and that grog (0.1%) and organic elements (less than 0.1%) are occasionally present.



**Figure 6- 3: Pel Paste Types by Sherd Count**

There are inclusions in 79.3% of the sample, which are normally black (50.8%) or red (23.1%) ferruginous lumps, although mica, shell, carbon, quartz, pebbles, and pumice are all present, and, occasionally, organics and grog appear to be inclusions but not the primary temper.

## **Pel Complex (A.D. 250-550)**

There are four primary wares in the region during the Early Classic. With one exception (Lanquin Unslipped), all of the unslipped types are standard Tzakol Uaxactun Unslipped. The slipped vessels include Paso Caballo Waxy (continuing from the Late Preclassic), Petén Glossy (standard lowland Classic-period ceramics), and Cahabon Flakey, which the dominant ware in the northern highlands during this time period.

### **Unslipped**

#### ***Uaxactun Unslipped Ware***

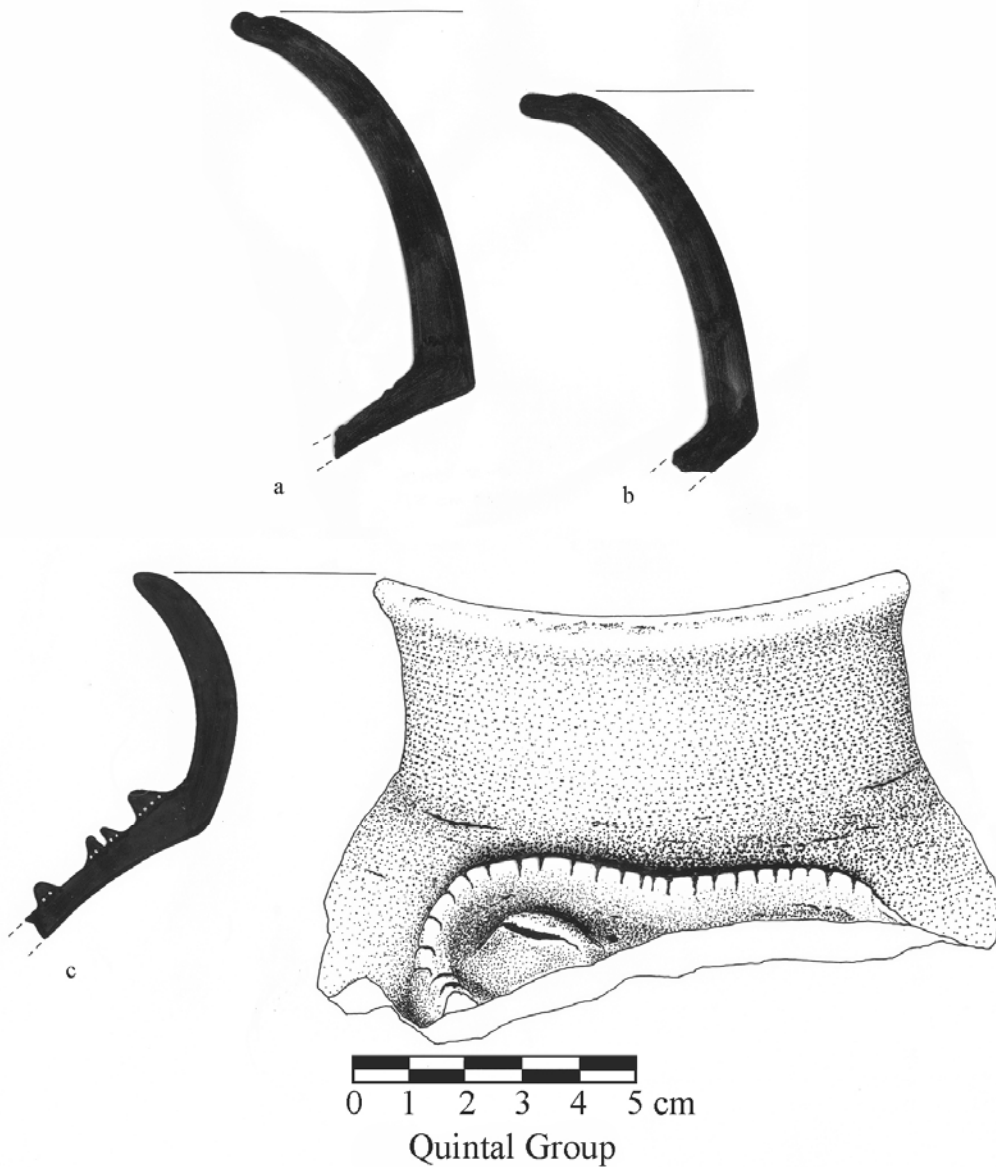
*Quintal Group* (70% of the Early Classic sample)

**Ware:** Uaxactun Unslipped

**Complex:** Tzakol

**Sample:** 11,618 sherds, 3 partial miniature vessels, 1 ceramic disk, and 1 modified sherd, 1,045 of which were subjected to a more detailed analysis. The sample mostly consists of body sherds (91%), but rims (4%), special bodies (3%), rim-to-base sherds (1%) are occasionally present. There are also very small amounts of appendices and bases (less than 1% together).

**Principal identifying modes:** 1) A greyish, unslipped surface with small, linear scars from removing temper that made it to the surface of the vessel; 2) orangish red, yellow, or red paste with medium to large quartz, sand, or calcite temper; 3) a squat jar, plate, bowl, or shoe pot.



**Figure 6-4: Quintal Group, a-b) Quintal Unslipped:Quintal, c) Candelario Appliqué:Candelario Paste:** As one would expect from a common utilitarian ware, the paste is extremely variable in color and composition. The paste ranges from a dark red (7.5R4/6) to a light yellow (7.5YR8/3), although it is most commonly an orangish red (10R5/6, 6/6). The

temper is most commonly medium (39%) or large (18%) quartz or a mixture of medium quartz and sand (31%), followed by fine quartz (4%) or calcite (1%), medium (3%) or large (1%) calcite, and occasionally medium sand (1%). Fine sand, badly-sorted calcite, or a mixture of badly sorted quartz and calcite are very rare; together, they form 1% of the sample. The majority of the sherds have red (23%) or black (53%) ferruginous inclusions, or occasionally mica (1%) or mica and ferruginous lumps (1%). While 49% of the sample is evenly fired, there is often a thick dark nucleus (28%), followed by a thin nucleus (9%), a dark interior half (9%), and a dark exterior half (5%).

**Surface:** While unslipped, the surface is very diagnostic of its type. Unlike unslipped wares in other time periods, a conscious effort was applied to smoothing out the exterior portion of the vessel and brushing out any temper that might have appeared on the surface. Because of this, the surface is pocked with small brush-scars (much like the underside of Early Classic polychrome vessels). The scars tend to taper in the same direction where multiple pieces were removed at the same time. Over 85% of the sherds have fire-clouding on the exterior of the vessel from the cooking process. The paste fires to varying shades of grey on the surface.

A very small part of this sample (0.2%) has red slip on the interior of the neck, which ranges from 10R5/8 to 2.5YR6/8. This slip is always placed directly on top of the vessel surface.

**Forms:**

1) A squat jar (99%) with a flaring neck that was constructed separately from the body with a height that averages 5.8 cm (2.7-10.6 cm). There is a joint at the intersection of the neck and the body, often with smoothing scars in the interior. The lip most



commonly has a shallow groove (48%), but rounded (23%) and squared (17%) lips are also common. At times, the lip is pointed (1%) or with an interior (2%) or exterior (3%) bevel. Some of the sample has a slight groove inside the rim with a lip that is pointed (less than 1%), squared (2%), or rounded (3%). One example, which probably dates to the Tzakol-Tepeu transition, has a rim that is doubled over onto the exterior but with a visibly flared lip, and a very small amount of lips have a “pie-crust” impressed decoration. There are rounded handles on one example, and the vessels have a coke-bottle, round, or ring base. The diameter is 21.5 cm (8-48 cm), and the wall thickness is 8.6 mm (5.4-17.4 mm).

2) An incensario (less than 1% of the sample) with a long interior “flange.” It is unclear which is the right side up in the sample, but the neck or base is 7.4 cm tall (4-10.7 cm) and has a diameter of 19.8 cm (14-33 cm). Lips are rounded, squared, or with an interior or exterior bevel. The wall thickness is 11.3 mm (8.6-13.1 mm).

3) A general bowl form (less than 1% of the sample) with a rounded or squared lip and a 28.7 cm diameter (20-38 cm). The wall thickness is 8.2 mm (5.2-13.8 mm). 33% of the general bowl sherds have evidence of a ring base.

4) A bowl with sloping walls, a flat or ring base, and a rounded, interior beveled, shallow grooved, or squared and grooved lip. The vessel is 2.7 cm tall with a diameter of 25.3 cm (19-40 cm), and the wall thickness is 8 mm (6.6-10.1 mm).

5) A shoe pot (less than 1% of the sample) with one nubbin support on the toe and one on either side of the heel. The wall thickness is 6.8 mm (4.3-10 mm). This form is Tzakol 1.

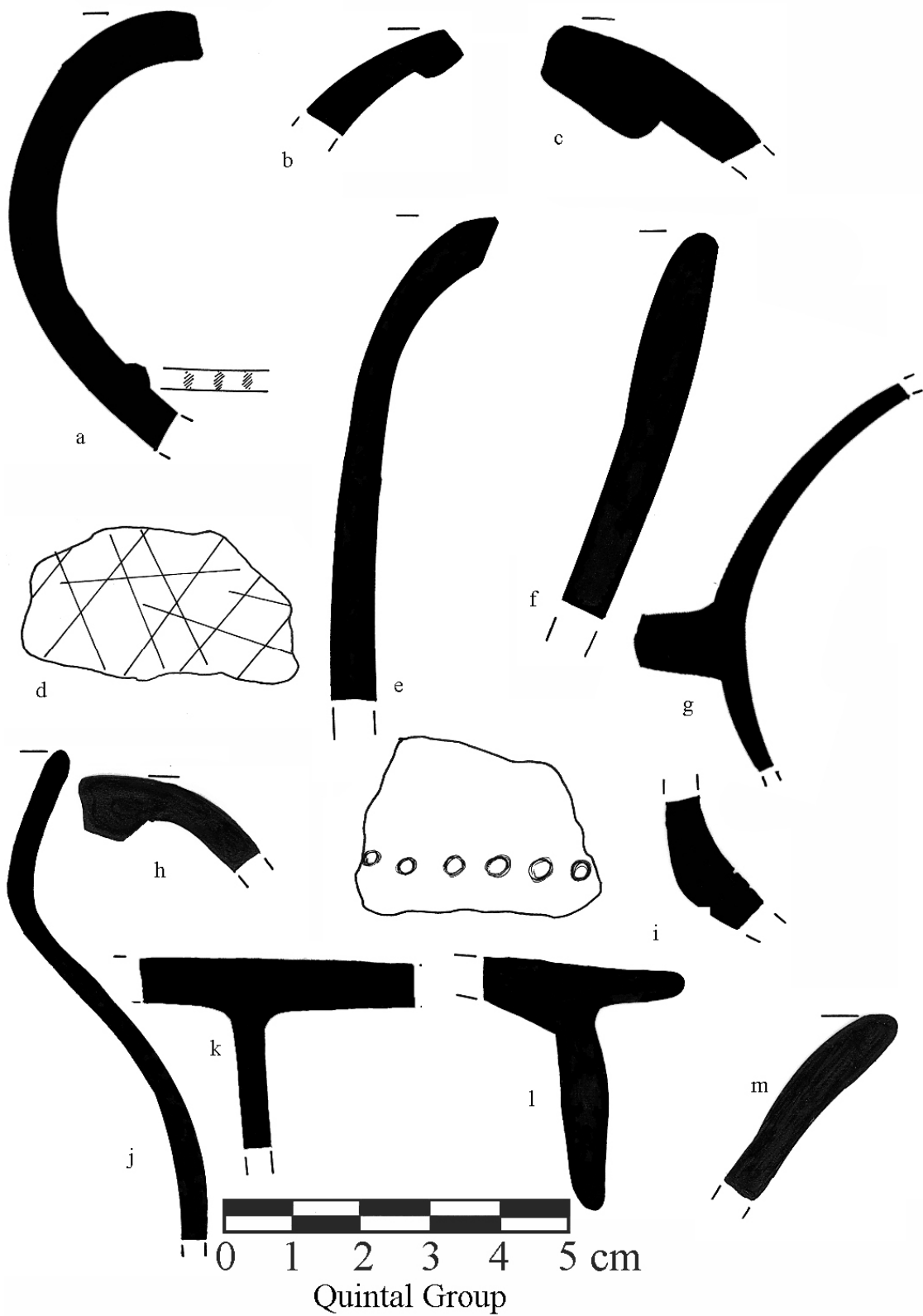


Figure 6- 5: Quintal Group, a, i) Candelario Appliqué:Candelario; b-d, g-h, j-m) Quintal Unslipped:Quintal; e-f) Quichan Washed:Quixchan

6) A plate with slightly inclined walls and a flat base (a comal form, less than 1% of the sample) with a rounded, squared, exterior beveled, or shallow grooved lip. The diameter is 38 cm (26-60 cm); the wall thickness is 9 mm (7.2-9.8 mm).

7) A slightly incurving bowl (less than 1% of the sample) with a rounded, squared, pointed, or interior beveled lip. The diameter is 21.6 cm (12-31 cm) and the wall thickness is 8.6 mm (6.3-11.8 mm).

8) A miniature version of the same incurving bowl (less than 1% of the sample) with an interior bevel and a 3 cm diameter. The wall thickness is 6.3 mm.

9) A bowl with a sharp Z-angle (less than 1% of the sample), a rounded lip, and a 39.5 cm diameter (35-44). The wall thickness is 10.2 mm (6.3-15.1 mm).

10) A barrel form (slightly bulging in the center, less than 1% of the sample) with a rounded or squared lip, a 22 cm diameter (21-24 cm), and a wall thickness of 8.2 mm (7.6-9.1 mm).

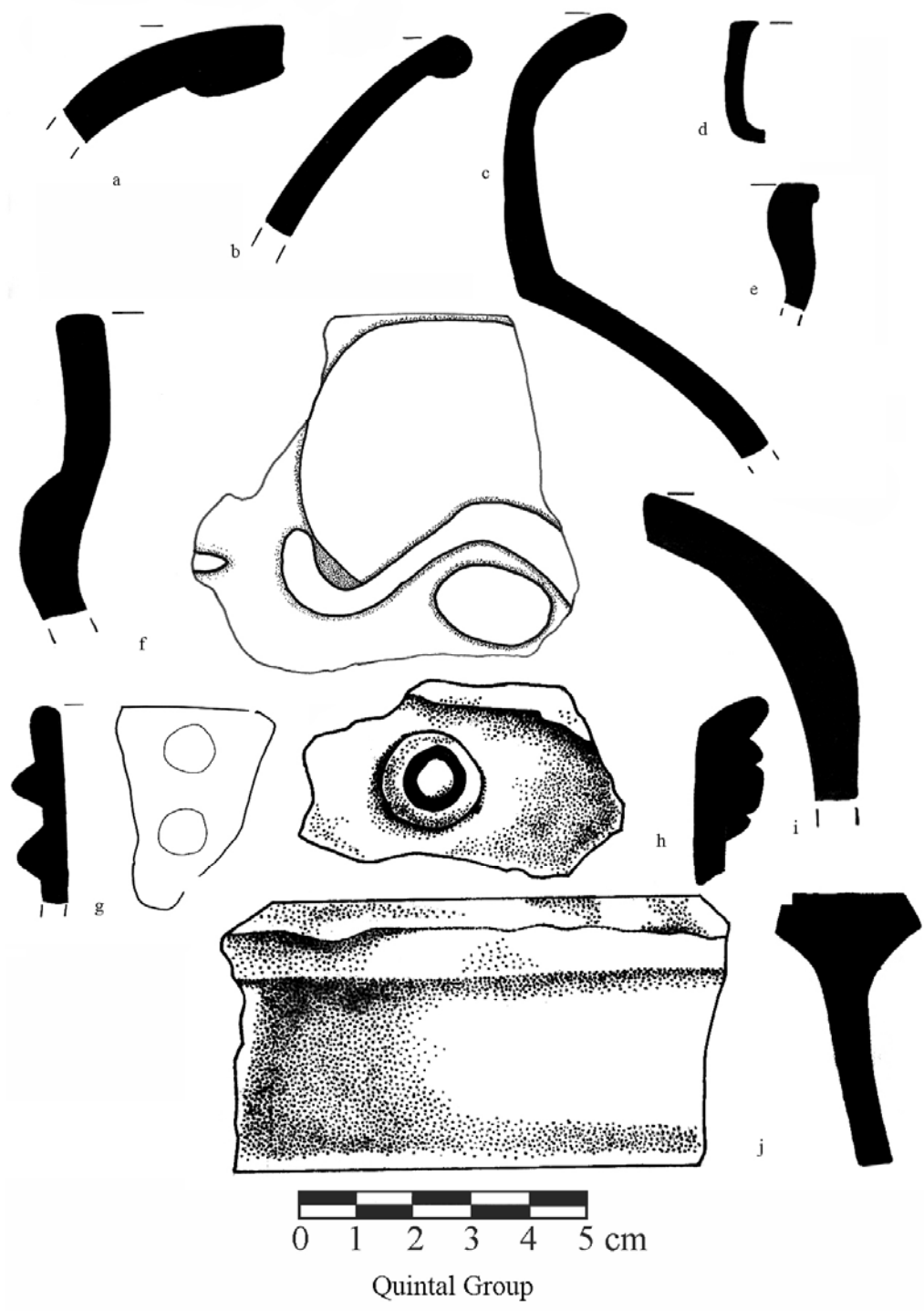
11) A sieve with large punctations (less than 1% of the sample), a rounded lip, and an 8 cm diameter. The wall thickness is 6 mm.

12) A spiked incensario (less than 1%) with a 26 cm diameter (23-29 cm), an interior beveled lip, and a wall thickness of 7.9 mm (7.1-8.6 mm).

13) A miniature jar (less than 1%) with a round base and a 6 mm wall thickness.

14) A cylinder (less than 1% of the sample) with a squared lip, a 3 cm diameter, and a 7.8 mm wall thickness.

15) A cup with sloping walls (less than 1% of the sample), an interior beveled lip, a 4.4 cm height, and an 8 cm diameter. The wall thickness is 5.2 mm.



**Figure 6- 6: Quintal Group, a-c, j) Quintal Unslipped:Quintal; d) Quintal Unslipped:Quintal miniature; e) Quixchan Washed:Quixchan miniature; f-h) Candelario Appliqué:Candelario; i) Quixchan Washed:Quixchan**

16) A general cup form (less than 1%) with a 6 cm diameter, an interior beveled lip, and a wall thickness of 7.1 mm,

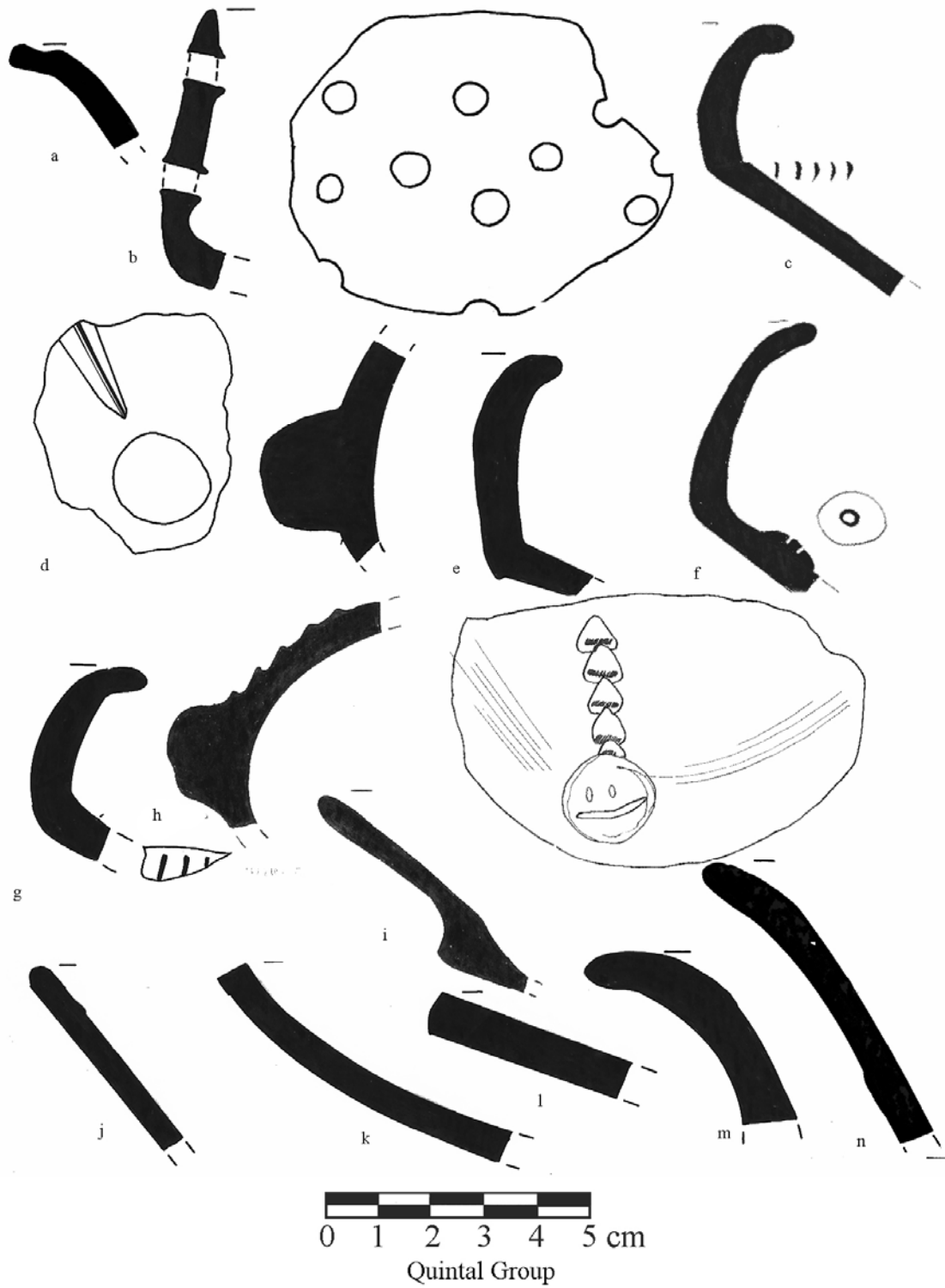


Figure 6- 7: Quintal Group, a) Silvano Incised:Silvano; b, i-n) Quintal Unslipped:Quintal; c-d, f-h) Candelario Apliqué:Candelario, e) Quixchan Washed:Quixchan

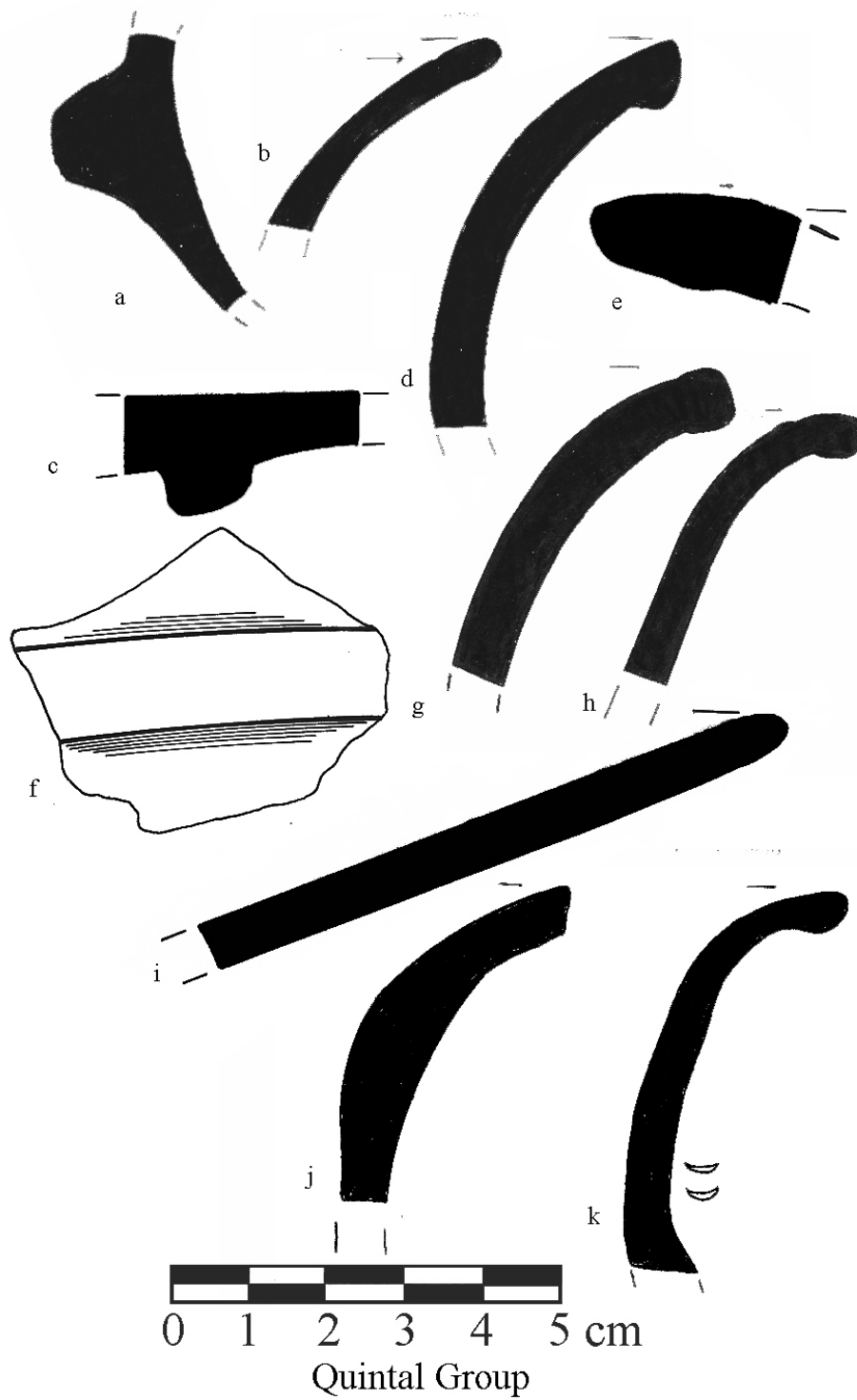


Figure 6- 8: Quintal Group, a, c, f, h-i) Quintal Unslipped:Quintal; b) Silvano Incised:Silvano; d, j) Quixchan Washed:Quixchan; e) Unnamed Fluted; g) Quintal Unslipped:ND/red interior; k) Candelario Appliqué:Candelario

17) A highland comal (less than 1%) with a 40 cm diameter and a rounded lip. The wall thickness is 8 mm.

18) A miniature cup form (less than 1%) with a diameter of 6 cm and a wall thickness of 7.1 mm.

**Type:variety Designation:** All of the sherds in this group could be placed in pre-existing types, although two new varieties were created:

Quintal Unslipped (R.E. Smith and Gifford 1966:161)—10,535 sherds (figure 6-4 *a-b*; 6-5 *b-d, g-h, i-m*, 6-6 *a-c, I*, 6-7 *b, i-n*, 6-8 *a, c, f, h-i*), 1 partial miniature vessel (figure 6-6 *d*), 1 ceramic disk, and 1 modified sherd

Quintal Unslipped:ND/red interior neck (the variety is present at other sites but formally established here)—21 sherds (figure 6-8 *g*)

Silvano Incised:Silvano (Laporte and Mejía 2005:351)—5 sherds (figure 6-7 *a*, 6-8 *b*)

Cubierta Impressed:Cubierta (R.E. Smith and Gifford 1966:157)—27 sherds

Candelario Appliqué:Candelario (R.E. Smith and Gifford 1966:155)—41 sherds (figure 6-4 *c*; 6-5 *a*; 6-6 *f-h*; 6-7 *c-d, f-h*; 6-8 *k*; 6-9 *a-c*)

Unnamed Fluted (Laporte *et al.* 1993:82)—1 sherd

Quixchan Washed:Quixchan (Laporte 1995a:53)—352 sherds (6-5 *e-f*; 6-6 *i*; 6-7 *e* 6-8 *d, j*) and 2 partial miniature vessels (figure 6-6 *e*)

Quixchan Washed:White Wash (Laporte 1995a:53)—1 sherd

Triunfo Striated:Ak (R.E. Smith and Gifford 1966:163 for the type; the variety was established by Adams 1971:19)—620 sherds

Triunfo Striated:ND/red interior neck (R.E. Smith and Gifford 1966:163 for the type; the variety is established here)—1 sherd

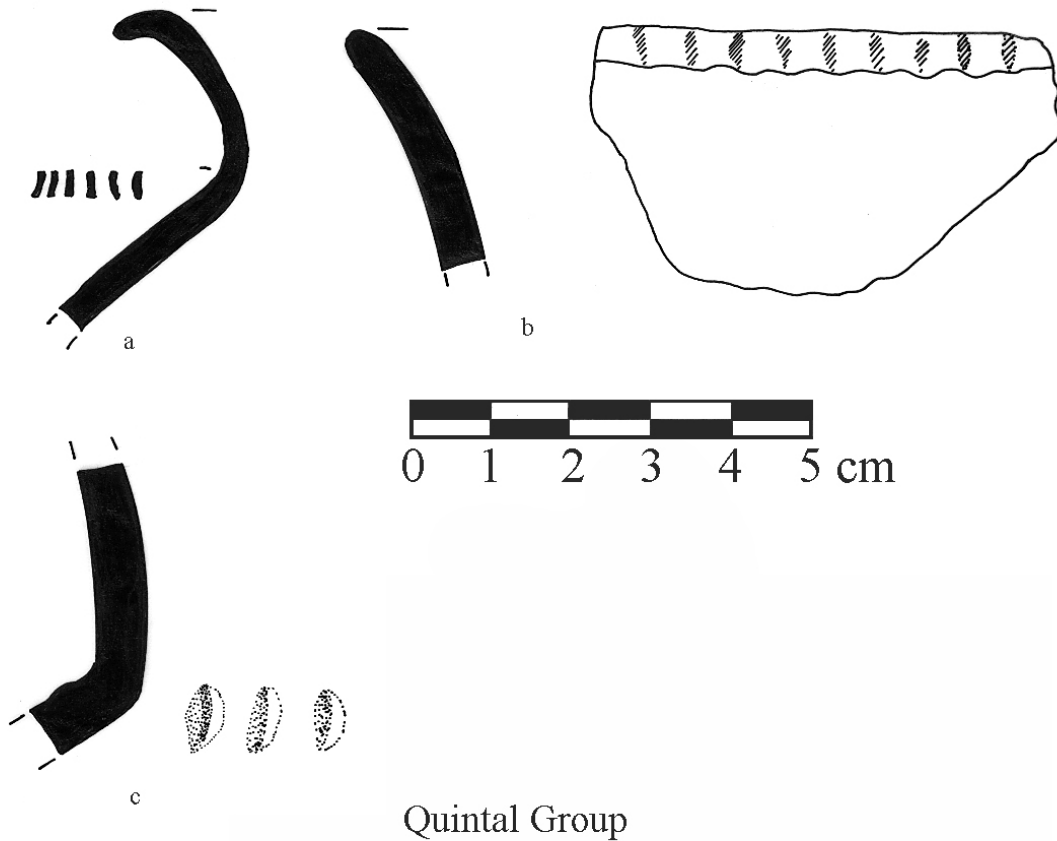


Figure 6- 9: Quintal Group, a-c) Cubierta Impressed:Cubierta

**Decoration:**

1) *Plain* (91%): Undecorated ceramics in this group not only compose the vast majority of the sample, but also run the range of most of the vessel forms.

2) *Striated* (5%): This type of decoration is almost exclusively found on the exterior of jars, although one bowl has striations as well. The striations in this group are shallow, short, and irregular; only in one case do they extend onto the neck. While in the



central Petén striated vessels in the Quintal group often have appliquéd decoration as well, this is not the case here, so the simpler Ak variety was used to designate this material.

They are easily distinguishable from later Cambio group (Encanto Striated) striations by both the depth and the level of regularity of its striations, as well as by the color of the surface—all of the Early Classic unslipped wares tend to have a greyer surface than their Late Classic counterparts, which move towards beige or tan.

3) *Washed* (3%): A light red wash was placed on the exterior of a jar, incensario, bowl with sloping walls, a plate with very inclined walls, a slightly incurving bowl, a shoe pot, a highland comal, and a general cup form. While the wash was intentionally placed on the vessels' exteriors, the paste tends to be a slightly deeper red than its unwashed counterpart, Quintal Unslipped:Quintal.

4) *Appliqué* (less than 1%): There is a variety of appliquéd designs in this sample. The most common is a jar with button appliqués, but a shoe pot with an appliquéd peccary face, a sieve with button appliqués, and incensarios with a either spike or god-face appliqués are also present.

5) *Impressed* (less than 1%): Circular reed impressions are occasionally found on jars, normally just below the neck on the shoulder of the vessel. In two examples this decoration co-exists with “pie-crust” rims.

6) *Incised* (less than 1%): This decoration normally appears on jars, but bowls are also occasionally incised. The decoration consists of simple lines carved into the surface of the vessel, either around the rim or on the upper body below the neck.

7) *Zoned slipping* (less than 1%): In each case the slip is red, and is only found on the interior neck of jars. All of the sherds appear to be otherwise undecorated with the exception of one sherd which is also striated.

8) *Fluting* (less than 1%): Horizontal fluting on the exterior of the bowl below the lip

***Interregional comparisons:*** Quintal is a wide-spread group in the Petén, appearing in the Petexbatun region (Foias 1996:368-72), Seibal (Sabloff 1975:101), Tikal (Culbert n.d., Laporte 1979:221), Uaxactun (R.E. Smith and Gifford 1966:161, Smith 1955), El Mirador (Forsyth 1989:73-5), Yaxchilan (López Varela 1989:98), La Joyanca (Forné 2005:483-4), Calakmul (Domínguez Carrasco 1994:104-110), the Dolores Valley (Laporte *et al.* 1993:82), and Edzna (Forsyth 1983:78-9). Rounded or grooved lips are the most common throughout the region (folded-over or bolstered rims are present but rare at many of the sites, and at Yaxchilan the lips are squared or grooved). The wall thickness is rather uniform where recorded, normally between 8 and 10 mm.

Temper is normally coarse with the exception of the Tikal sample (Culbert n.d.), where it is a finer carbonate paste similar to slipped types. The striated vessels do have a much coarser paste typical of the Quintal Group at other sites.. Fire clouding and ferruginous inclusions are common at all of these sites.

Jars are the most common form in most of the region, with the exception of the Dolores Valley, where plate and bowl forms dominate. The jars have an identical form and surface treatment at all sites. The necks are of variable heights, smallest at Seibal (2.5-4 cm) and potentially largest at Edzna (5-10 cm), although they are described as being medium or tall with no specific quantifiers in Tikal and Uaxactun. The sample

from the Petexbatun has neck heights of between 4.3 and 6.7 cm tall. The diameters are similarly variable—smallest at Seibal (16-24 cm), slightly larger in the Petexbatun (26.6 cm mean) and El Mirador (26 cm), and widely variable at Edzna (14-26 cm).

Plates and bowls have incurved, straight, sloped, or flaring walls. The diameters are normally between around 16 and 24 cm Seibal. Some shoe pots in this type appear in the Dolores Valley. No Z-angle bowls were present.

At Altar de Sacrificios (Adams 1971), this type is absent (only a local variety of Triunfo Striated was found, see below), and no simple unslipped ware exists at this time in most of the highlands or at Tonina (Becquelin and Baudez 1984), although a striated type, Chemash Striated, is contemporaneous (see below).

Several related types are found at other sites in the Maya lowlands—Texcoco Unslipped (Holley 1983:361-2) at Piedras Negras and Hewlett Bank Unslipped (Gifford 1976:190-1) at Barton Ramie. The former appears to be identical to Quintal Unslipped from the description—carbonate temper in a pink or reddish-brown paste, drag lines, a 9.9 mm wall thickness, and similar forms. One example of a bowl has a larger diameter, however (42.8 cm). Hewlett Bank Unslipped is the only type in its group; it is not given a ware classification and is limited chronologically to Tzakol 1. The temper is normally quartz or calcite, although a few sherds appear to have ash temper. Flaring-walled bowls have exterior beveled lips and flat bases. The diameter for the form is 15-20 cm, and the thickness is 4-8 mm. Both types have rare appearances of jars, with plates and bowls being the dominant form.

At Salinas de los Nueve Cerros (Dillon 1979:48-9), the only unslipped type in the Early Classic is Lapon Unslipped (appearing in Tzakol 3 and Tepeu 1 contexts), which is

used for miniature vessels, normally elongated or globular jars and straight or slightly incurving cups. The vessels were very poorly made, with a rough surface and finger-marks present from shaping the clay. The paste is pinkish and has sand, mica, and tuff temper.

In Alta Verapaz, Chatillas Smoothed appears in both Early and Late Classic contexts and is often a jar (see description below). Grama Incensario is also present in this time period (again, see description below).

Triunfo is a very common, widespread type in much of the lowlands and is present in Altar de Sacrificios (Adams 1971:19), Seibal (Sabloff 1975:101-2), the Petexbatun (Foias 1996:375-9), Naj Tunich (Brady 1989:208), La Joyanca (Forné 2005:484-5), Yaxchilan (López Varela 1989:99), Piedras Negras (Holley 1983:371), Uaxactun (R.E. Smith and Gifford 1966:163), Tikal (Laporte 1989:221, Culbert n.d.), El Mirador (Forsyth 1989:75), and Edzna (Forsyth 1983:77-8).

The paste is normally coarse carbonate, although sand appears in part of the Seibal sample and in all of the Altar examples. The paste is normally brownish or pinkish, and fire-clouding is normally present. Striations are similar to those found on Zapote Striated vessels (see description above) and are irregular in all but the Tikal sample. The wall thickness is normally between 7 and 9 mm, with thinner examples in the Petexbatun. Rims are widely variable—at Yaxchilan they have an exterior groove, and at Tikal there is occasionally a pie-crust rim (see Cubierta Impressed above). In Edzna and Mirador there is often an exterior bolster.

Applications are frequent in the collection from Uaxactun and occasionally present in Tikal and El Mirador but absent in most other locations. This prompted

Adams to define a separate type for his sample, which I have used in the present collection. Other varieties are present in Edzna (Dzicilia), where the striations are broad and spaced. There is a variance in the decoration in the Southeastern Petén and El Mirador, where the striations continue to the lip, a mode present in a small quantity of the present sample.

Jar forms are normally the only form reported, with a short (Yaxchilan and Seibal), tall (Altar de Sacrificios, Tikal, and El Mirador), or wide-ranging (Edzna and Piedras Negras) neck height. The shortest examples are in Seibal, where the height ranges from 1.5-5 cm, while the collection at Piedras Negras sometimes surpasses 15 cm. The diameter falls into the range of 20-32 cm at Seibal, Yaxchilan, El Mirador, and Edzna. Bowls and plates are present in the collection from the Southeastern Petén and Piedras Negras, and shoe pots are found in the Southeastern Petén and near Poptun. (Adams 1971:19).

Several related types are found in the Barton Ramie collection (Gifford 1975:183-90)—Socotz Striated, White Cliff Striated, and Mopan; the differences are small. Socotz sometimes has striations on the neck; White Cliff is composed of bowls and dishes and has deeper, dragged striations; and Mopan is an appliquéd-striated type.

At Palenque and Tonina (Becquelin and Baudez 1984:230-1), Chemash Striated is the local striated type. A calcite temper dominates, and the form is exclusively a jar with a short (1.5-3 cm), incurving or out-sloping neck and a 14-27 cm diameter.

Incisions are rare in this group, only appearing in the southeastern Petén (Laporte, pers. comm. 2006) and the region presently under study.

A small number of necks with an orange-brown slip on the interior of the neck were identified at Uaxactun (R.E. Smith 1955:131, 145) in Tzakol 2 and 3 contexts, but this variety has not been identified anywhere else. This variety has only been identified here, although it is possible that some of the jars with an orange-brown slip at Uaxatun belonged to type Triunfo Striated. At Tikal, a striated ware with a thin red slip was reported by Culbert (n.d.). Maax Red-Striated is identical to Triunfo Striated with the addition of a post-striation red slip on the exterior of the vessel.

Cubierta Impressed is a very rare type in the Maya lowlands, and no corresponding type could be discovered in the highlands. It is present in Uaxactun (R.E. Smith and Gifford 1966:157), Tikal (Culbert n.d., Laporte 1989:222), the Dolores Valley (Laporte *et al.* 1993:82), and the Petexbatun. The type appears to be mostly associated with incensarios in the central Petén, while jars are more common in the south.

The most common decorations are digital impressions, creating a “pie-crust” lip, but at Tikal fingernail impressions were reported. At Seibal, one example of Triunfo Striated had finger-pinchings present.

Appliquéd sherds have been reported at Uaxactun (R.E. Smith and Gifford 1966:155), Tikal (Laporte 1989:222), La Joyanca (Forné 2005:485-6), and Becan (Ball 1977:106). Spikes are the most common applications, and this type seems to be mostly restricted to incensario forms.

Fluting and incising are very rare modes in Quintal and are only found in the southeastern Petén and the region presently under study. In the Dolores Valley, the fluted samples were jar forms with a grey surface and with horizontal fluting near the rim.

Washes are also very restricted—red washes have only been reported in this region and the southeastern Petén (Laporte 1995:53). White wash has a slightly wider range, having also been found in the Petexbatun (Foias 1996:373-4), where the vessels are bowls and plates with rounded, pointed, or interior beveled lips with an 8-10 mm wall thickness, a 3.4 cm height, and a diameter of 24-30. Neither there nor in the southeastern Petén is white wash used on jars (Ibid. 374).

***Intraregional comparisons:*** This group is present in the entire northern  $\frac{3}{4}$  of the region—all caves investigated in the Candelaria system, most of the caves around Raxruha Viejo and the San Francisco Hills, the aguada in La Caoba Vieja, and Tres Islas. The largest amount of variability in the region is in the Candelaria Caves, which is also where the largest amount of material has been recovered. The two areas most closely associated are the Candelaria Caves and the eastern part of the San Francisco Hills.

Comales are, surprisingly, present in the region, something not common to the lowlands until the Postclassic, but they are only found in ritual assemblages in caves. Some other rare forms for the type are present in small quantities in restricted parts of the region—Z-angled bowls are found in Candelaria and Tres Islas, and incensarios are found everywhere but the central part of the San Francisco Hills. Shoe pots are found throughout the Candelaria Caves (the largest known collection of shoe pots is from the Candelaria Cave system, Brady 1992) but in no other area.

The most common form throughout the region is a squat jar, which is followed by a bowl in Candelaria, an incensario in Tres Islas, and comales throughout the San Francisco Hills. The temper is most commonly quartz followed by quartz mixed with calcite in Candelaria and the eastern part of the San Francisco Hills, whereas it is most

commonly a quartz and calcite mix followed by quartz in the central part of the Hills and sand followed by quartz in Tres Islas.

The lips are most commonly grooved in Candelaria and in the eastern part of the San Francisco Hills. Rounded lips are the second-most-common in the Candelaria system followed by squared lips, while squared lips are more common than rounded ones in the San Francisco Hills. In the central part of the San Francisco Hills, the lips are most commonly rounded, followed by squared, while the one example from Tres Islas has an interior-beveled lip.

Striated sherds are also common and have been found in almost every cave and site in the northern  $\frac{3}{4}$  of the region, from the Candelaria Caves to Tres Islas. All of the examples are jars with the exception of one bowl from the Candelaria Caves. The lip is most commonly rounded in all regions, although a small amount of other lip forms are present in the caves in Candelaria and the San Francisco Hills. In the region as a whole, almost half of the sherds have a calcite and quartz mix for temper except for the eastern part of the San Francisco Hills, where it is most commonly quartz. In the rest of the region, the second most common temper is quartz; although in the San Francisco Hills it is a mixture of calcite and quartz.

Washed sherds are also found throughout the northern  $\frac{3}{4}$  of the region, although the majority of the sample comes from the Candelaria Caves; the one white-washed example is from Tres Islas. The jar is the dominant (Candelaria) or exclusive (San Francisco Hills) form in all of the caves but this form is absent at Tres Islas, where only incensarios appear. The lips are most commonly squared in Candelaria, followed by rounded, while the trend is reversed in the San Francisco Hills. Rims are absent in Tres



Islas. The temper is most commonly quartz in Candelaria, followed by a calcite and quartz mix, which is, again, reversed in the San Francisco Hills. All of the sherds in Tres Islas have a sand temper.

The other decorations are found in a more restricted part of the region. Impressed sherds are found in caves around Raxruha Viejo, in the Candelaria system, and in the San Francisco Hills, whereas the incised sherds are found only in the latter two regions.

Appliquéd and zoned sherds, on the other hand, are only present in Candelaria and the San Francisco Hills, and the single fluted sherd was recovered in the Candelaria system.

**Observation:** There is a general classification problem for this group, as rims are most commonly used for classification and description, which is problematic when the two most common unslipped types in the Early Classic (Quintal and Triunfo) are defined by the presence or absence of striations on the body, which is often not present on rim sherds. Due to the relative scarcity of Triunfo body sherds in the present collection, however, any Triunfo rims being subsumed into the Quintal designation are probably minimal.

### ***Lanquin Unslipped Ware***

*K'uk' Group*

**Ware:** Lanquin Unslipped

**Complex:** Unknown

**Sample:** 2 complete vessels

**Principal identifying modes:** 1) miniature cup with 2) a smoothed, unslipped surface.

**Paste:** Unknown (whole vessel).

**Surface:** The surface is smoothed and unslipped.

**Form:** A small cup with irregularly-shaped walls and a flat base.

**Type:variety Designation:** These vessels could not be assigned to any specific group or type, so a preliminary type and variety is given here:

K'uk' Unslipped:K'uk'

**Decoration:** Both of the vessels are without decoration.

**Interregional comparisons:** See description for Puñazo Orange:Puñazo below. Small cups like this are very rare, although they are present in other parts of the region in the Late Classic, most notably at the hilltop shrine of Ub'ub' (Woodfill, Ramírez, and Hurtado 2003). At Salinas de los Nueve Cerros, Lapon Unslipped (Dillon 1979:48-9) is a crudely-made miniature cup or vase without slip with flat or concave lids with pointed handles that were often found inverted in cached vessels. This type dates to the Early-Late Classic transition.

An unidentified, related type was found at Naj Tunich (Brady 1989:218-9), consisting of 2 crude, straight- or incurving-walled miniature cups with a flat base and calcite temper. The average height was 4.8 cm, and the diameter averaged 2.6 cm. Several small, unslipped cups were found in a cave in the Maya Mountains (Pruffer 2005:202), several of which had carbonized residue that might have been copal resin.

A larger cylinder (15.2 cm) with a smoothed surface was found in a "Protoclassic" tomb at La Lagunita (vessel 611, Ichon and Arnauld 1985:202, fig. 80f). It was classified as Saman Smoothed, although no other examples of this form were reported for the type. Another cylinder of roughly the same size (15 cm. tall, 12.2 cm.

diameter) with red diagonal lines on a buff surface was found in a probable Asunción Mita (Late Classic) context in Jutiapa (Bond 1989:78).

At Salinas de los Nueve Cerros, a similar vessel was found in a tomb containing human phalanges that were missing on the skeleton, prompting Dillon *et al.* (1985) to suggest that they were associated with auto-amputation. The vessels here were not associated with human remains, however.

***Intraregional comparisons:*** Both vessels were found in Hun Nal Ye.

***Observation:*** This type is identical to Puñazo Orange:Puñazo except for surface treatment, so I have placed this type into the same time period.

## **Monochromes and Dichromes**

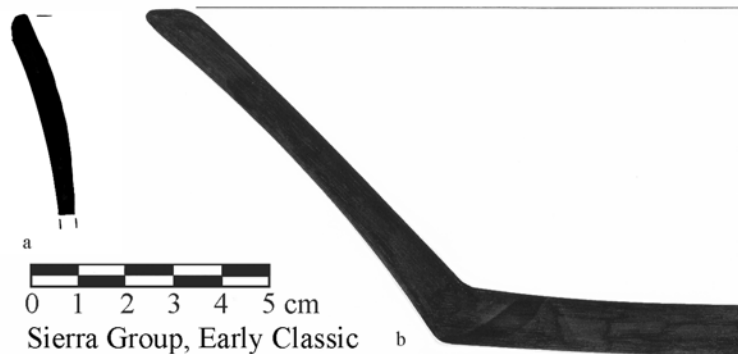
### ***Paso Caballo Waxy Ware***

*Sierra Group* (less than 1% of the Early Classic sample)

***Ware:*** Paso Caballo Waxy

***Complex:*** Peripheral Chicanel

***Sample:*** 3 sherds and one partial vessel, all of which were subjected to a more detailed analysis. The parts represented in the sample are rims and rim-to-base sherds.



**Figure 6- 10: Sierra Group, a-b) Sierra Red:Vaquero Creek**

**Principal identifying modes:** 1) Thin, dull or streaky red slip; 2) sloping-walled bowls with a flat base; 3) reddish, fine paste with sand, calcite, or quartz temper.

**Paste:** The paste is reddish (10R4/6 to 6/6 and 2.5YR5/6) with a fine temper that can be sand, calcite, or quartz. Two of the examples have red or black ferruginous lumps. No dark nucleus is present in any of the sherds.

**Slip:** The slip is thin, slightly waxy, and dull. The color is red or reddish orange (10R4/6 to 5/6 and 2.5YR4/4). The sherds are slipped on the interior and exterior until the base.

**Form:** A deep bowl with sloping walls that were probably used for lip-to-lip caches. The bases are all flat, and three of the four have an interior-beveled lip; the fourth has a simple rounded one. All of them demonstrate a slight outflare just before the lip. The vessels are 7.5 cm tall (5.1-9.8 cm) with a diameter of 23.8 cm (21-28 cm). The wall thickness is 8.5 mm (7.6-9.4 mm)

**Type:variety Designation:** These sherds correspond to a pre-established type and variety:

Sierra Red:Vaquero Creek (The type was established by R.E. Smith and Gifford 1966:163, and the variety was established as an Early Classic variety by Laporte and Mejía 2005:352)—3 sherds (figure 6-10 *a*) and one partial vessel (figure 6-10 *b*)

**Decoration:** The vessels are undecorated.

**Interregional comparisons:** This variety is only found during this time period in the Southeastern Petén and the region presently under study.

**Intraregional comparisons:** These sherds all come from the same cave in the Candelaria system.

**Observation:** The slip is thinner and less waxy than its Late Preclassic counterpart, and the color is much more uneven, with a high degree of discoloration, although this probably is from use rather than the initial firing.

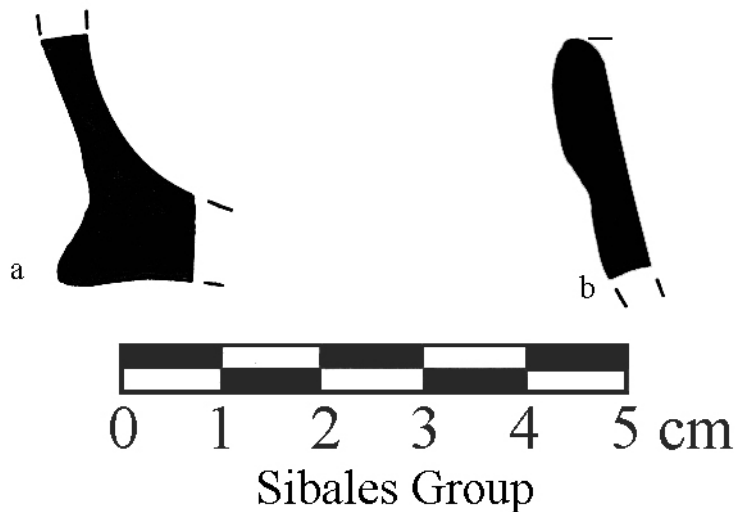
*Sibales Group* (less than 1% of the Early Classic sample)

**Ware:** Paso Caballo Waxy

**Complex:** Peripheral Chicanel

**Sample:** 51 sherds and one complete vessel, of which 32 were subjected to a more detailed analysis. Rims (42%) and body sherds (42%) make up the majority of the sample, with special bodies (13%) and rim-to-base sherds (2%) making up the rest of the material.

**Principal identifying modes:** 1) A very thin, erodeable red slip; 2) a soft, easily-carved red or orange slip; 3) a bowl form.



**Figure 6- 11: Sibales Group, a-b) Sibales Red:Sibales**

**Paste:** The paste color spans from orangish red (5YR6/6 to 7/6) to a light orange (5YR6/6 to 7/6), but is normally a light red (10R6/8) or reddish orange (2.5YR6/6). The

most common tempers are fine (31%) or medium (19%) and sand (16%), but there is also occasionally fine to large calcite (22%), a mix of volcanic ash and medium quartz (3%), or grog (6%). Inclusions are present in 50% of the sample and are most commonly black (28%) or red (9%) ferruginous lumps. Occasionally there are ground ceramic (9%) or organic (3%) inclusions. 28% of the sample has a dark nucleus, which is normally dark.

**Slip:** The slip is thin, waxy, and fragile. It is most commonly a dark red (10R4/6, 10R4/8, or 10R5/8), although the color varies within the sample (from 7.5R4/8 to 2.5YR7/6). In the example of the whole vessel, the slip continues to the mid-section of the medial flange, and the interior slip has worn away, probably from the friction caused by the simple act of carrying the cache to its final location. Half of the sample has an equally thin and fragile cream underslip. 2% of the sample has dark fire-clouding present on the vessel surface.

**Forms:**

1) A general bowl form (52%) with a rounded (25%), squared (50%) or exterior beveled (25%) rim, and a diameter of 25.5 cm (23-28 cm). The wall thickness is 8.3 mm (5.6-12.8 mm).

2) A bowl with sloping walls (38%) and a wall thickness of 8.6 mm (6.1-10.3 mm).

3) A bowl with sloping walls (4%) and a coke-bottle base with an interior beveled (50%) or rounded (50%) lip (one of the latter examples has a slight groove above the lip). The bowl has a large medial flange 1.5 cm below the rim and a diameter of 29 cm (21-36 cm). The wall thickness is 8.6 mm (6.1-10.3 mm).

4) A plate with sloping walls (2%) and a flat base with a rounded lip. The vessel is 57 cm in diameter with a height of 9.3 cm; the wall thickness is 15 mm.

5) A bowl with flaring walls (2%) and a wall thickness of 9.1 mm.

6) A bowl with a sharp Z-angle (2%) and a wall thickness of 7.6 mm.

7) A slightly-incurved bowl with a rounded lip, a wall thickness of 5.3 mm, and a 28 cm diameter (2%).

**Type:variety Designation:** This material corresponds to one pre-established type:

Sibales Red:Sibales (Established as Sibal Red in Forné 2005:416)—51 sherds (figure 6-11 *a-b*) and one complete vessel

**Decoration:** This sample is undecorated.

**Interregional comparisons:** This group has been identified here and at La Joyanca (Forné 2005:416-7), although this type might have been mixed in with Sierra Red in other collections. The sample from La Joyanca is more varied than the present one, but this type falls into the range of the collection.

**Intraregional comparisons:** The northern part of the region—Tres Islas and Cerro Ávalos. Several sherds have also been typed as Sibales Red in the Cancuen assemblage (pers. observation, 2006).

**Observation:** Originally classified as Sierra Red:Avaleni, it was changed after talking to Melanie Forné, who identified “Sibal Red” in the La Joyanca collection. Since this type shared its name with Sibal Buff Polychrome, a Tepeu 1 type established by R.E. Smith and Gifford (1966:163), the name was changed to “Sibales.”

In the original designation, Forné classified the type as Petén Glossy due to its temporality in the Early Classic. However, I have changed the ware for this sample since it is closer to Peripheral Chicanel in form and paste.

*Flor Group* (less than 1% of the Early Classic sample)

**Ware:** Paso Caballo Waxy

**Complex:** Peripheral Chicanel

**Frequency:** 2 sherds (one body and one body-to-base sherd), both of which were subjected to a more detailed analysis.

**Principal identifying modes:** 1) A jar with 2) a thin, waxy cream slip; 3) red paste with quartz temper.

**Paste:** The paste is a light red (10R6/6 and 7/6) with a fine quartz temper, ferruginous inclusions, and a dark nucleus.

**Slip:** Both examples are slipped on the exterior only with an orangish cream slip (7.5YR8/4, 5YR7/4) that is thinner than its Late Preclassic relatives. The sherds are slipped on the exterior to the base.

**Form:** A general jar form with a wall thickness of 3.9 mm (3.8-4.0 mm). One example has a flat base.

**Type:variety Designation:** These sherds do correspond to a previously established type and variety.

Flor Cream:Pétalo (Laporte *et al.* 1993:88)

**Decoration:** These sherds are undecorated.



***Interregional comparisons:*** This group has only been reported in an Early Classic context in the southeastern Petén (Laporte 1993:88, Laporte, pers. comm. 2006) and the region presently under study.

***Intraregional comparisons:*** These sherds were only recovered in the Candelaria system.

***Observation:*** The slip is less waxy than the Late Preclassic varieties but has the same tone of cream as Flor Cream:Flor. The sherds are also a bit thinner than the original variety.

*Polvero Group* (less than 1% of the Early Classic sample)

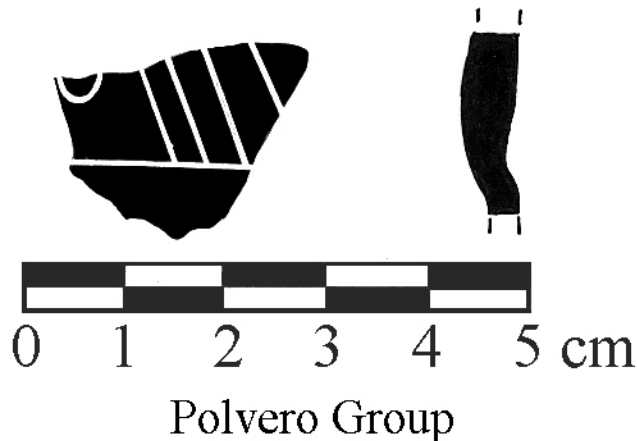
***Ware:*** Paso Caballo Waxy

***Complex:*** Peripheral Chicanel

***Sample:*** 8 body sherds. 4 were subjected to a more detailed analysis.

***Principal identifying modes:*** 1) A bowl with 2) a thin waxy black slip; 3) orange paste with sand temper.

***Paste:*** The paste ranges from a dark red (10R5/6) to a light yellowish orange (7.5YR7/3) but is most commonly a reddish orange (2.5YR3/4 or 6/6). The temper is usually fine sand, although fine and medium calcite are also used. All of the sherds have ferruginous lumps, but one example has a thick dark nucleus. The paste of one of the sherds is very obviously Early Classic, as it is identical to that of Sibales Red:Sibales—extremely soft and carveable with a fingernail.



**Figure 6- 12: Polvero Group, Lechugal Incised:Miranda**

**Slip:** A somewhat waxy but fine black slip on both the interior and exterior of the vessels.

**Forms:**

- 1) A bowl with flaring walls, rounded lip, and a 24 cm diameter. The wall thickness is 12.2 mm.
- 2) A bowl with sloping walls and a wall thickness of 5.9 mm.
- 3) A thin-walled, rounded Z-angle bowl with a wall thickness of 5.9 mm.

**Type:variety Designation:** Two pre-established varieties of the Late Preclassic types were identified:

Polvero Negro:Suyacal (The variety was established by Laporte *et al.* 1993:89)—  
6 sherds

Lechugal Incised:Miranda (Ibid: 2005:352)—2 sherds (figure 6-12)

**Decoration:**

- 1) *Plain:* The undecorated sherds are from flaring- or sloping-walled bowls

2) *Incised*: The incised sherds are from an indeterminate form and a curved Z-angle bowl. The incisions are post-firing and located on the exterior of the vessel forming simple or complex geometric patterns.

***Intraregional comparisons***: The plain sherds were recovered from the San Francisco Hills and Tres Islas, while both incised sherds were found in caves—one in the Candelaria system and one in the San Francisco Hills.

***Interregional comparisons***: This group has only been reported in an Early Classic context in the southeastern Petén (Laporte 1993:89, Laporte, pers. comm. 2006) and the region presently under study.

*Baclam Group* (less than 1% of the Early Classic sample)

***Ware***: Paso Caballo Waxy

***Complex***: Peripheral Chicanel

***Frequency***: 7 sherds. 5 were subjected to a more detailed analysis. The sample includes 4 body sherds, 2 rim sherds, and a neck sherd.

***Principal identifying modes***: 1) A light orange paste with calcite or quartz temper; 2) waxy orange slip; 3) a jar or bowl form.

***Paste***: The paste is a light orange (5YR5/4 and 7.5YR6/8) with either a fine calcite (40%) or a fine (20%) or medium (40%) quartz temper and black (80%) or red (20%) ferruginous inclusions. There is a thin, dark nucleus in one example.

***Slip***: A somewhat waxy orange slip (2.5YR5/6, 5/8, and 6/8), which was placed on a cream underslip in 60% of the sample. 3 sherds were slipped only on the exterior and 2 on both the interior and exterior. Another sherd was slipped on the interior and the

exterior to the flange, and the final sherd was slipped on the exterior and interior to the base of the neck.

**Forms:**

1) A general jar form (57%) with a wall thickness of 6.5 mm (5.9-7.3 mm).

2) A bowl with incurving walls (29%) and an interior bevel on the lip with a 29.5 cm diameter (16-23 cm). The wall thickness is 7.1 mm (6.2-7.9 mm).

3) A general bowl form (14%) with a wall thickness of 7.4 mm.

**Type:variety Designation:** All of these sherds belong to the same, pre-established variety of a Late Preclassic type:

Baclam Orange:Serafin (Laporte and Mejía 2005:352)

**Decoration:** All of the vessels are undecorated.

**Interregional comparisons:** This group has only been reported in an Early Classic context in the southeastern Petén and the region presently under study. For a general description of Early Classic orange-slipped types, see the discussion for Águila Red-Orange:Águila below.

One type that might be related to this one was described by Dillon and is described in the discussion of Baclam Orange:Baclam above, as it appears both in the Late Preclassic and the Early Classic.

**Intraregional comparisons:** These sherds come from the central part of the region, in Candelaria and the San Francisco Hills.

**Observation:** A few of the sherds could have been misclassified as Baclam Orange:Serafín that might have been simply sherds of Águila Orange:Águila with a slip that was heavily modified by water flowing over them, as they were found in caves that

occasionally flood. However, since a similar process did not seem to affect any of the sherds from other caves with similar hydrology, this is an unlikely scenario.

*Boxcay Group* (less than 1% of the Early Classic assemblage)

**Ware:** Paso Caballo Waxy

**Complex:** Peripheral Chicanel

**Sample:** 2 whole vessels, both of which were subjected to a more detailed analysis.

**Principal identifying modes:** 1) Slightly waxy, mottled brown slip covering the entire vessel; 2) plates with sloping walls and flat bases; 3) yellowish-orange paste with fine quartz temper.

**Paste:** The paste is a light yellowish-orange (7.5YR7/4) with fine quartz temper and ferruginous lumps.

**Slip:** A somewhat waxy, mottled brown slip (2.5YR6/6) covering the whole vessel, including the exterior of the base. Like the Late Preclassic Boxcay Brown:Boxcay, it is unclear whether the brown slip was intentional, as it was not a solid brown but instead spotty and at times fading to orange or cream. The slip is located on both the interior and the exterior, including the base.

**Form:** A plate with sloping walls and a flat base with a rounded lip. The vessel is 4.5 cm tall (4-4.9 cm) with a 17.5 cm diameter (15-20 cm). The wall thickness is 9.1 mm (8.7-9.4 mm)

**Type:variety Designation:** These sherds belong to a pre-established Early Classic variety of a Late Preclassic type

Boxcay Brown:Peralta (Laporte pers. comm. 2006)

**Decoration:** These vessels are unslipped.

**Interregional comparisons:** This group has only been reported in an Early Classic context in the Southeastern Petén (Laporte, pers. comm. 2006) and the region presently under study.

**Intraregional comparisons:** Both of the vessels were found together in an Early Classic cache in the small community of Cerro Ávalosl.

**Observation:** The vessels were classified into the Early Classic variety of Boxcay because of their context, cached inside of a Sibales Red:Sibales bowl. It is likely that the two vessels were created for the purpose of the cache, since they have no signs of use and perfectly nest one inside the other.

*Differentiated Color Group* (6 sherds, less than 1% of the Early Classic sample)

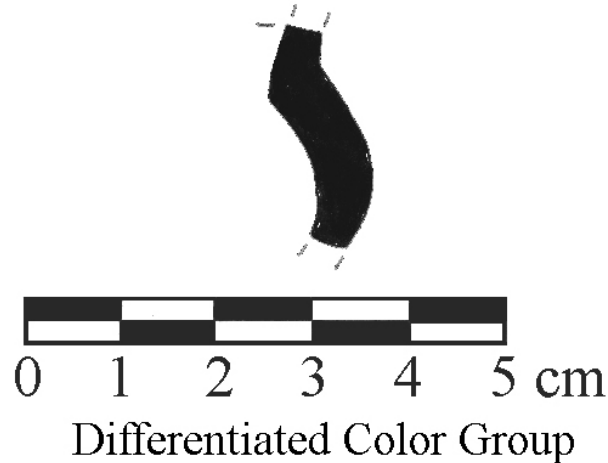
**Ware:** Paso Caballo Waxy

**Complex:** Peripheral Chicanel

**Sample:** 7 sherds, 6 of which were subjected to a more detailed analysis. 5 of the sherds are body sherds and 2 are rims.

**Principal identifying modes:** 1) A red paste with calcite or sand temper; 2) a bowl with 3) a waxy slip that is 4) different colors on the interior and exterior.

**Paste:** The paste is reddish (10R5/6, 5/8, and 6/6) with a temper that is fine to large quartz, fine calcite, or grog. All but one sherd has red or black ferruginous inclusions; one example has a thick dark nucleus and another is completely oxidized. In part of the sample the paste is extremely soft, like Sibales Red.



**Figure 6- 13: Differentiated Color Group, Chimuelo Dichrome:ND/red interior**

**Slip:** The surface is slipped with a well-burnished, shiny slip that is waxy but not as much as in earlier time periods. Only 3 slip colors are present in this sample—orange (2.5YR6/8 to 5YR6/8), red (10R3/4 to 2.5YR5/6, but most commonly 10R4/6), and black. One of the sherds has a cream underslip, and the Z-angled bowl is only slipped to the angle on the outside.

**Forms:**

- 1) A Z-angled bowl with a wall thickness of 9.7 mm.
- 2) A round bowl with a wall thickness of 3.4 mm.
- 3) A general bowl form with a wall thickness of 8.6 mm (6-10.5 mm).

**Type:variety Designation:** All of the sherds belonged to established types:

Chimuelo Dichrome:ND/red interior (Laporte and Mejía 2005:352)—2 sherds  
(figure 6-13)

Hechizo Dichrome:Chachacche (Laporte and Mejía 2005:352)—2 sherds

Guachiman Dichrome:ND/red interior (Laporte and Mejía 2005:352)—3 sherds

**Decoration:** All are dichromes, with an orange exterior and red interior, a red exterior and black interior, or a black exterior and red interior.

***Intraregional comparisons:*** While the Hechizo (red exterior) sherds come from Tres Islas, the rest are only found in the Candelaria Caves and the nearby Sierra Chinaha.

***Interregional comparisons:*** This group has only been reported in Early Classic contexts in the Southeastern Petén (Laporte, pers. comm. 2006) and the region presently under study. In the Late Preclassic, however, a variety of Caramba Red-on-red-orange, Maabal (Forsyth 1989:44-5), has zoned red and reddish orange slips, normally with one color on the interior and another on the exterior. The form repertoire is more variable, however, with round bowls, labial-flanged bowls, hooked-rim bowls, and jars all present.

Another Preclassic type, this time defined in Belize, Matamoro Bichrome (established by Pring 1977), was originally placed in the Sierra Group and had red and black (or occasionally cream) slips on opposite sides of the vessel and has been identified at Cuello (Kosakowsky 1987:79) and in the Dolores Valley (Laporte *et al.* 1993:73). Laporte later refined the classification and defined this variety for the Early Classic.

*Ixobel Group* (7 sherds)

***Ware:*** Paso Caballo Waxy

***Complex:*** Peripheral Chicanel

***Frequency:*** 7 sherds, all of which were subjected to a more detailed analysis. 6 of the sherds are rims, and the other is a body-to-base sherd.

***Principal identifying modes:*** 1) A bowl with a hooked rim, 2) a streaky orange slip, and 3) a rough, thick, paste quartz or calcite temper.

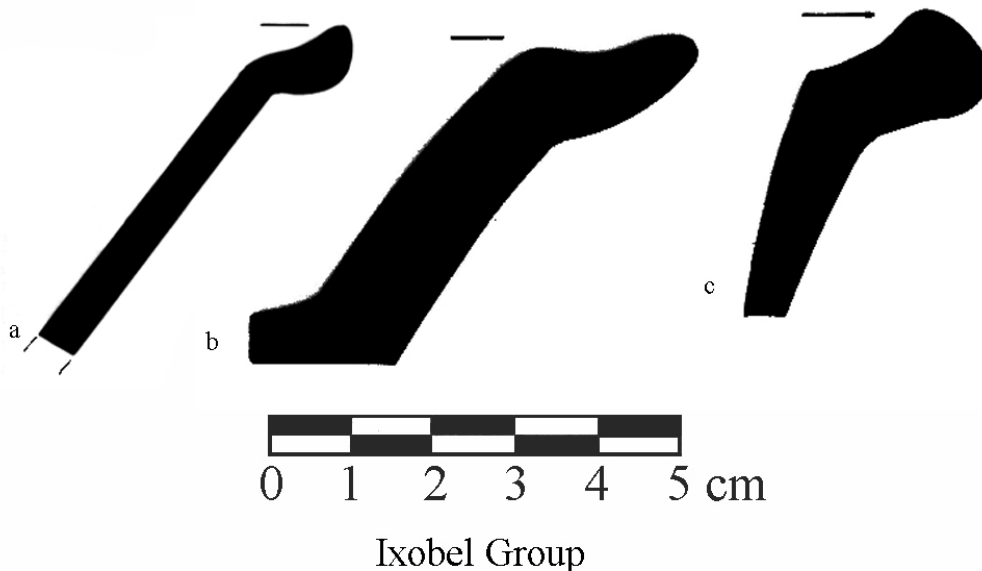
***Paste:*** The paste is extremely rough and thick and a reddish (10R6/6 to 8/4) or orange (5YR6/4) color. The temper is fine quartz (43%) or a mixture of medium (43%) or badly



sorted (14%) calcite and quartz in heavy doses. All of the sherds have inclusions, either black (71%) or red (29%) ferruginous lumps. Only two examples have dark nuclei.

**Slip:** While the slip has worn off in some examples, those that still have slip are covered in a streaky, slightly waxy red or orange slip (10R4/6, 2.5YR6/8), although one charred example might have had a black slip. One of the sherds appears to have had a cream underslip, and half of the sample has fire clouding.

**Form:** All of the examples are bowls, sometimes with a flaring wall but normally sloping to the exterior. The diagnostic “hook” or “S-shaped” lip is present on all but one example, which is simply rounded and thickened on the exterior (this lip form is not always common and not present at Naj Tunich, where the type was established). The diameter is fairly variable, between 25 and 33 cm, with an average of 29 cm. One example has a flat base. The wall thickness is 9.4 mm (8.0-12.4 mm).



**Figure 6- 14: Ixobel Group, Ixobel Orange:Ixobel**

**Type:variety Designation:** This sample corresponds to a pre-established type:

Ixobel Orange:Ixobel (Brady 1989:166 defined the type and noted that its occurrence spanned the Late Preclassic and Early Classic—7 sherds (figure 6-14 *a-c*)

***Decoration:*** These sherds are all undecorated.

***Interregional comparisons:*** This type is incredibly rare in the Maya World and is restricted to the extreme southern Petén. There is a very restricted number of forms present; all examples are roughly made and are bowl or plate forms with the diagnostic hooked rim. The type is restricted to caves—Naj Tunich (Brady 1989), a few caves in the Dolores Valley (Laporte *et al.* 1993:78), the present sample, and one tomb at Ixkun (Laporte pers. comm. 2006). The present sample is more closely related to the Dolores Valley, as the rims are very different from the Naj Tunich sample, where they have everted rims with squared lips. It was originally classified as a Late Preclassic type but appears to continue through the Early Classic.

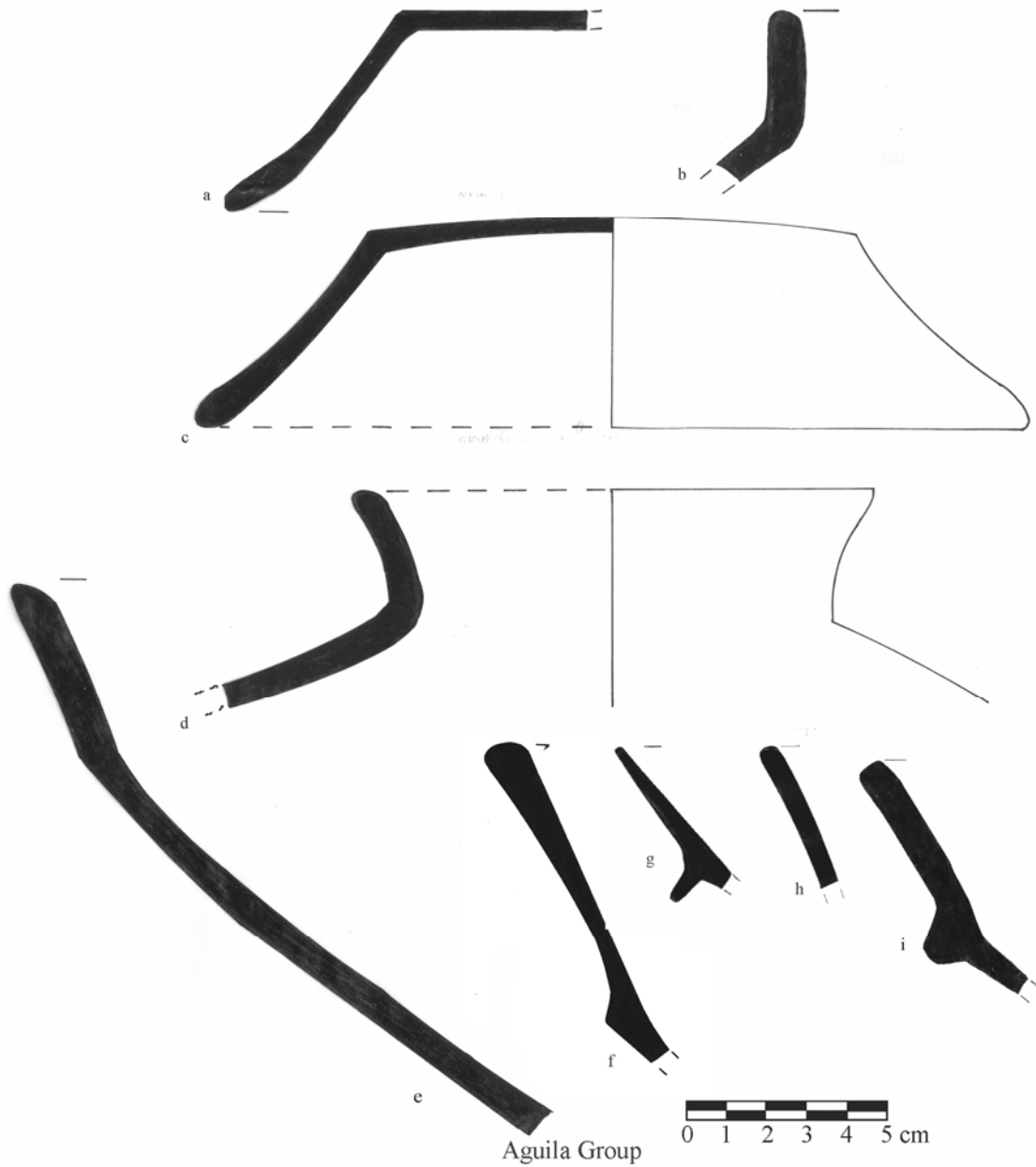
***Intraregional comparisons:*** All of these sherds come from the same cave in the eastern part of the San Francisco Hills.

***Observation:*** This type appears throughout the Late Preclassic and Early Classic and could have been cached in the cave in either of the two time periods. Since most of the cave activity occurs in the Early Classic, I decided to place this sample in this time period.

### ***Petén Glossy Ware***

*Águila Group* (17% of the Early Classic sample)

***Ware:*** Petén Glossy



**Figure 6- 15: Águila Group, a-i) Águila Red-Orange:Águila  
Complex: Tzakol**

**Sample:** 2791 sherds, 2 partial vessels, 10 complete vessels, 3 sherds from miniature vessels, 6 ceramic disks, and 20 modified sherds, 716 of which were subjected to a more detailed analysis. The sherds include 2,159 body sherds, 221 special bodies, 216 bases, 198 rims, 20 necks, 17 rim-to-bas sherds, and 11 appendices.

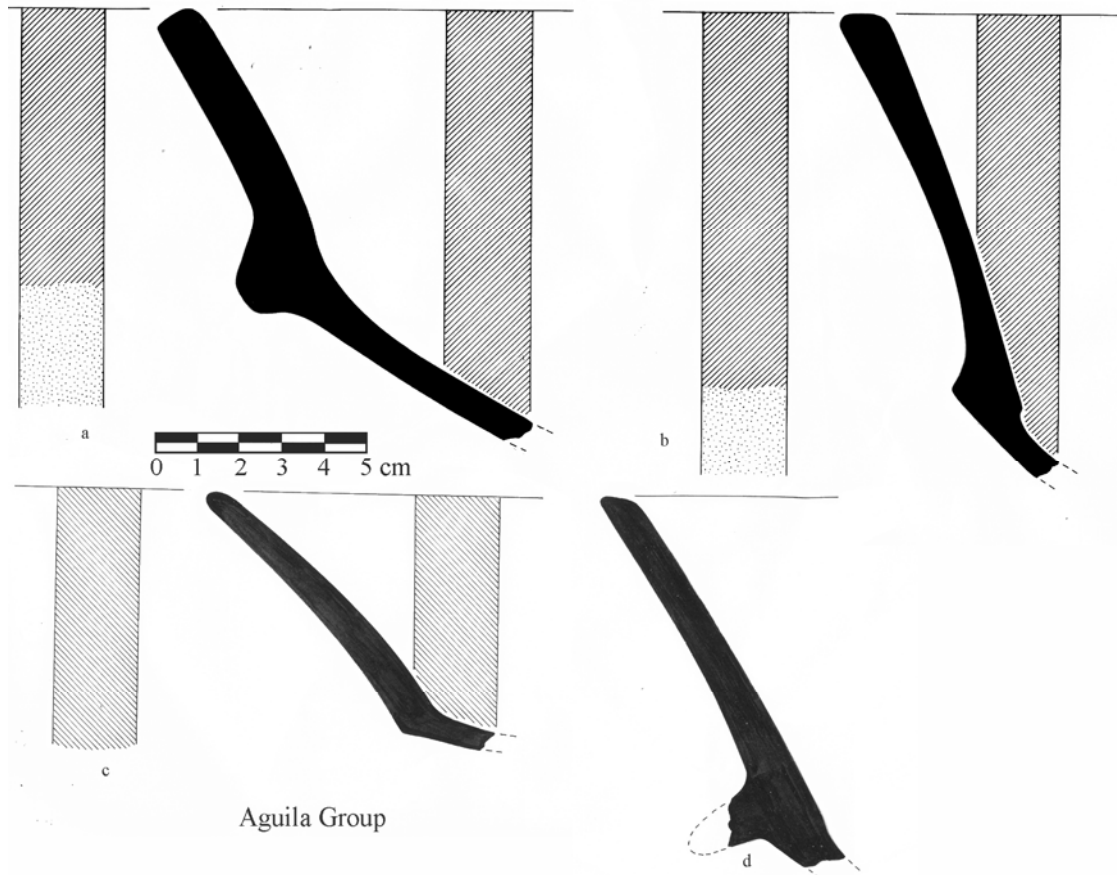
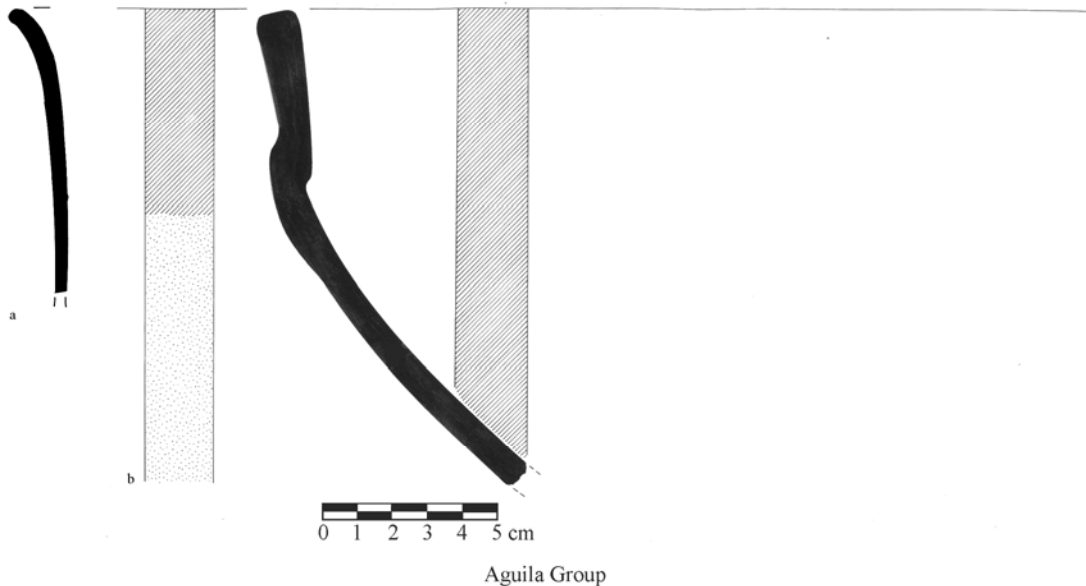


Figure 6- 16: **Águila Group, a-c) Águila Red-Orange:Águila**

**Principal identifying modes:** 1) A squat jar, bowl, cylinder, or cup, often with a ring base; 2) a glossy slip that spans most shades of orange and red; 3) fine to medium paste with variable temper.

**Paste:** The paste is highly variable in color, from a dark red (7.5R3/6) to a light orange (7.5YR8/2), but tends to be an orangish-red (10R5/6 to 6/6) or a reddish-orange (2.5YR5/6 to 6/6). The temper is most commonly fine (37%) or to medium (30%) quartz, although fine to medium calcite (15%), small (1%) or medium (6%) quartz and calcite mix, badly sorted calcite (1%), large quartz (3%) or calcite (1%), fine (4%) or medium (1%) sand, or even fine volcanic ash (1%) are lesser alternatives. Black (58%) or red (21%) ferruginous inclusions are common, with occasional mica (1%), shell (less

than 1%), charcoal (less than 1%), pumice (less than 1%), or pebbles (less than 1%) found in the sample. There is a dark nucleus present in 41% of the sample, which tends to be thick.



**Figure 6- 17: Águila Group, a-b) Águila Red-Orange:Águila**

**Slip:** The slip is widely variable within the sample, although constant on the same vessel or sherd. It is most commonly a light, reddish-orange (2.5YR5/8) but is often a deep red (10R4/8 or 10R5/8), and occasionally a yellowish-orange (7.5YR 6/8 or 7.5YR7/6), covering every color in between. 51% of the sample has a cream underslip, and just under 1% has a white underslip. 15% of the sample has dark fireclouding. Jars are slipped on the exterior to the base and in the interior neck. Z-angled bowls and bowls with basal flanges are slipped on the interior and the exterior until the angle or flange. Sherds with an interior smudging (see below) tend to have a slightly less glossy orange slip but are otherwise identical. The slip is normally only on the exterior of sherds (69%), but it is sometimes only on the interior (10%), on both sides (9%), or on the

interior and the upper part of the exterior (8%). When bases are present, they are normally slipped on at least the exterior side (56 vs. 13 bases).

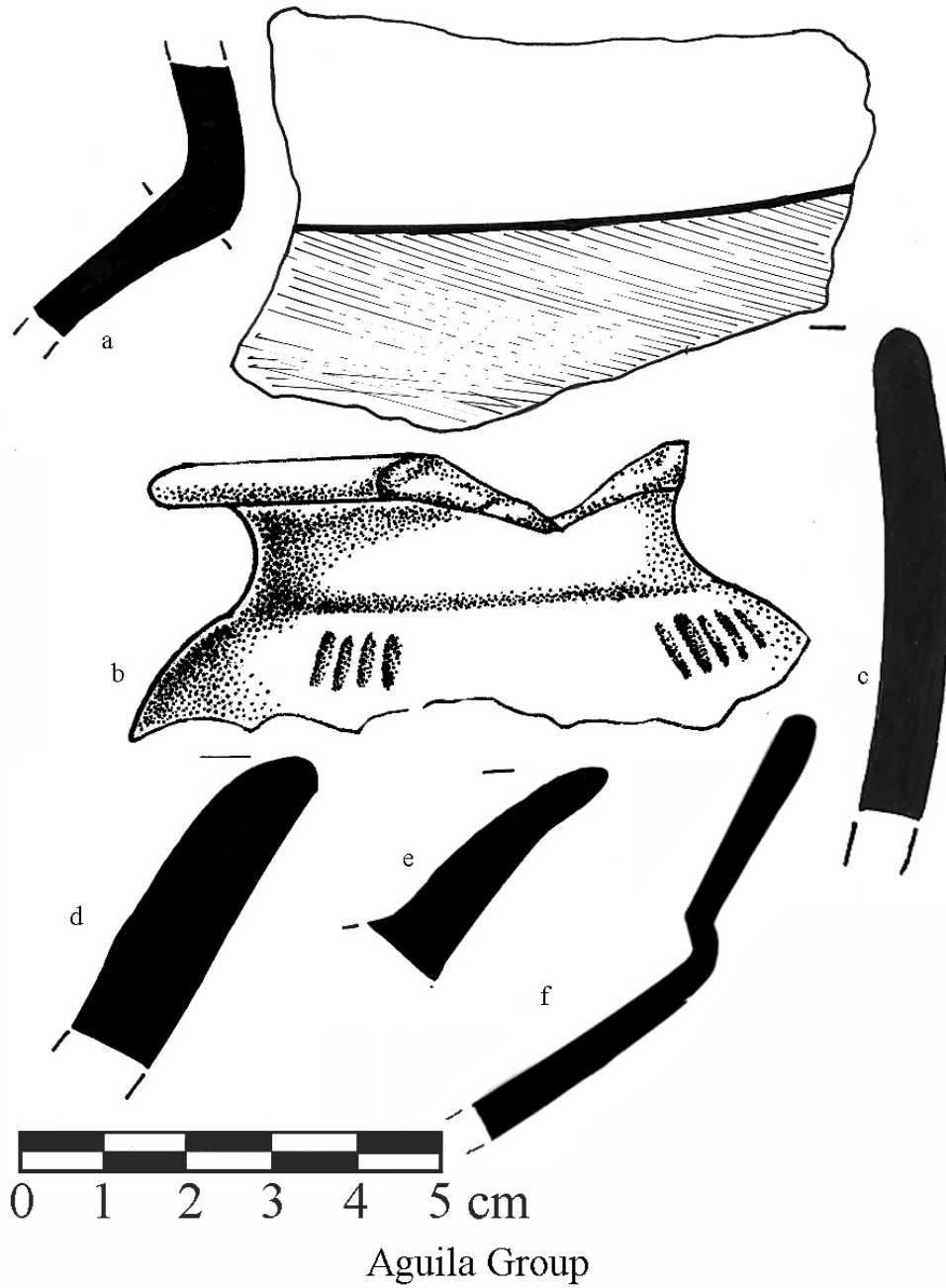


Figure 6- 18: Águila Group, a) Diego Striated:Diego, b) Milpa Impressed:Milpa, c-f) Águila Red-Orange:Águila

**Forms:**

1) A squat jar (77%) with a sharp 90-degree angle where the neck was joined to the body, normally with evidence of smoothing in the interior of the joint. The rim is rounded (81%), squared (5%), pointed (4%), or with an interior (9%) or exterior (2%) bevel. The vessel normally has a coke-bottle base (90%), but it is occasionally flat (8%), with a ring base (4%), or rounded (2%). The neck is 4.5 cm tall (2.1-7.7 cm), and the vessel has a 14.3 cm diameter (8-30 cm) and a wall thickness of 7.3 mm (4.3-15.1 mm).

2) A general bowl form (13%) with a rounded (52%), squared (10%), or interior (27%) or exterior (10%) beveled lip. The lip is extremely rarely bolstered in the exterior or doubled over onto the exterior. The vessels normally have a ring base (97%), but occasionally the base is flat (2%) or rounded (1%). The height of one of the vessels is 5 cm, and the diameter is 24.6 cm (9-51 cm). The wall thickness is 7.4 mm (5-12 mm).

3) A bowl with a sharp or curved Z-angle (4%) and a rounded (6%), squared (14%), or interior (69%) or exterior (10%) beveled lip and a ring base. The Z-angle is found 5.1 cm below the rim (3.2-9.9 cm) and the diameter is 41.8 cm (30-over 70 cm). The wall thickness is 9.5 mm (5.2-15.6 mm).

4) A bowl with flaring walls; rounded, squared, or an interior beveled lip; and a flat or rounded base. The vessel is 3.3 cm tall with a 30 cm diameter (13-60 cm) and a wall thickness of 7.7 mm (6.6-10.5 mm).

5) A bowl with sloping walls (2%); a rounded (25%), squared (16%), or interior (57%) or exterior (2%) beveled lip; and a flat (72%) or ring (28%) base. The vessel is 8.6 cm tall (8-9.2 cm) with a diameter of 30.2 cm (13-60 cm) and a wall thickness of 8.2 mm (4.9-13.7 mm).

6) A bowl with a slightly incurving wall (under 1%) and a rounded (64%), squared (7%), or interior (21%) or exterior (7%) beveled lip. The diameter is 20.6 cm (8-33 cm) and the wall thickness is 6.7 mm (4.4-9.2 mm)

7) A bowl with a basal flange (under 1%) located 5 cm (3.5-7.3 cm) below the lip, which has an interior bevel. The diameter is 28.6 cm (26-33 cm), and the wall thickness is 7.5 mm (5.9-9 mm).

8) A cylinder (under 1%) with a rounded lip, a 6 mm (4.7-7.4 mm) wall thickness, and a 10 cm diameter.

9) A cup (under 1%) with slightly in-sloping walls and a wall thickness of 5 mm.

10) A general cup form (less than 1%) with a rounded lip and a flat base. The diameter is 18.3 cm (15-22 cm), and the wall thickness is 6.8 mm (4.4-11 mm).

11) A probable drum (less than 1%) with a wall thickness of 10.8 mm.

12) An Early Classic “cache pot” (less than 1%) for lip-to-lip caches. It is a deep bowl with slanting walls, often with a slight flare just below the lip, which is rounded (33%), grooved (17%), or with an interior bevel (50%). The base is slightly rounded (67%) or a “coke-bottle” (33%) form. The vessel is 9.2 cm with a 27.8 cm diameter (25-33 cm) and a wall thickness of 7.8 mm (5.8-9 mm).

13) A miniature, sharp Z-angled bowl with a round lip, a 9 cm diameter, and a wall thickness of 7.7 mm.

14) A miniature round bowl with an 8 cm diameter, a rounded lip, and a 6.9 mm wall thickness.

**Type:variety Designation:** Most of the sample can be divided into pre-established types; one type and one variety are established here:



Águila Red-Orange:Águila (R.E. Smith and Gifford 1966:154 as Águila Orange; it was modified to include red sherds by Laporte 1989:222-3)—2,779 sherds (figure 6-15 *a-I*, 6-16 *a-c*, 6-17 *a-b*, 6-18 *c-f*), 2 partial vessels, 10 complete vessels, 3 miniature sherds, 6 ceramic disks, and 20 modified sherds

Pita Incised:Pita (R.E. Smith and Gifford 1966:161)—6 sherds

Buj Incised:B'oj (Adams 1971:43 established the type, the variety is established here)—7 sherds

Milpa Impressed:Milpa (R.E. Smith and Gifford 1966:159)—4 sherds (figure 6-18 *b*)

Diego Striated:Diego (Hermes 1984)—1 sherd (figure 6-18 *a*)

Pom Smudged:Pom (established here)—31 sherds

***Decoration:***

1) *Plain* (98.5%): The vast majority of sherds are undecorated. Sherds without decoration correspond to every form.

2) *Smudged* (1.1%): The exterior of the vessel is covered with a duller than normal slip, and the interior has been smudged an equally dull black from firing the vessel upside-down (Reents-Budet, pers. comm. 2006). Only one example has fire-clouding on the exterior of the vessel. This decoration is limited to bowls with incurving, sloping, or sloping walls, indeterminate bowl forms, or cylinders.

3) *Fine-incised* (0.2%): The incisions are much better executed than Pita Incised:Pita (which, like in Adams' sample in Altar de Sacrificios, is on par with Lucha Incised:Lucha) with more complex geometric designs, most commonly cross-hatched triangles. Fire-clouding is present on one example. Bowls (either indeterminate or with

flaring walls) or cylinders are present in the sample. The major difference between this variety (B'oj) and the standard Buj variety is the width of the incisions—they are narrower in this sample than at Altar.

4) *Rough-incised* (0.2%): The incisions are much rougher and simpler than on Buj Incised:Buj, so they were classified as Pita Incised. They tend to be found on the exterior of the vessel and often have rows of roughly-scratched cross-hatched triangles near the tops and bottoms of the vessels.

5) *Impressed* (0.1%): Two of the examples have a line of digital impressions on the exterior, while the third has small impressions in the form of inverted triangles. The decoration is limited to jars and slightly incurved bowls. The digital impressions seem to foreshadow Zapotal Impressed:Zapotal, but because of the context which would preclude a Late Classic presence and the differences in paste I have classified them as Milpa Impressed:Milpa.

6) *Striated* (less than 0.1%): One jar is slipped on the interior and the exterior to the base of the neck, beneath which the exterior body is covered with shallow, irregular striations that are identical to Triunfo Striated:Triunfo.

***Interregional comparisons:*** Due to the differences of opinion and variations among samples, an interregional comparison is difficult. As it is defined by the ceramicist, Águila is present in the Petexbatun (Foias 1996:380-7), Altar de Sacrificios (Adams 1971:26-7), Tikal (Culbert n.d., Laporte 1989:222-3), El Mirador (Forsyth 1989:61-6), Edzna (Forsyth 1983:63-5), Uaxactun (R.E. Smith and Gifford 1966:154), Yaxchilan (López Varela 1989:87-90), La Joyanca (Forné 2005:395-7), Piedras Negras (Holley 1983:394-9), and Barton Ramie (Gifford 1976:182).

All types share the fundamental problem of having a wide range of colors present in the slip, which often grade into shades of the red type designation. The temper is normally carbonate, with a small amount of volcanic temper in the Petexbatun, and a predominate micaceous sand temper at Altar. Paste color is normally pink. Lips are most commonly rounded, except for the basal flanged and Z-angled vessels, which often have an interior bevel. Average wall thickness is normally 6 mm and up, with thinner examples coming from the Petexbatun.

Bowls or plates were more common than jars at all sites except El Mirador, and jars are absent from the Yaxchilan collection. The bowls are rounded, flaring-walled, basal-flanged, Z-angled, and sloping walled. Bowl bases are normally annular or flat with the exception of the collection at Piedras Negras, where tripod basal-flanged bowls are common, and general bowls have an impressed disk base.

Jars normally have a flat or coke-bottle base and the neck is of variable height (at Piedras Negras, the reported range is between 4.9 and 6.2 cm. At no other site were the heights measured). Diameters are variable as well, but normally cluster between 10 and 15 cm, with smaller examples coming from the Petexbatun.

In Belize, Águila is nearly non-existent, with a distinct red slip being used with few orange examples. On the other side of the lowlands, it is present in small quantities at Palenque (Rands 1974:60-1) but the carbonate paste is aberrant at the site, indicating that it is probably an import.

Caribal is present at Altar de Sacrificios (Adams 1971:21), Seibal (Sabloff 1975:105), the Petexbatun (Foias 1996:408-413), Naj Tunich (Brady 1989:172), and Yaxchilan (López Varela 1989:92). Dos Hermanos is found in Uaxactun (R.E. Smith and

Gifford 1966:157), Barton Ramie (Gifford 1976:160-1). This type was reworked into a variety by Forsyth (1989:61-6), and this was continued by Laporte *et al.* (1993:84) in the Dolores Valley and Forné (2005:397-8) at La Joyanca.

There are subtle differences in the surface treatment—Caribal Red is a deep, blood red and tends to have bowl forms, while true Dos Hermanos has small black splotches on the slip but is otherwise indistinguishable from the Águila collection.

At Salinas de los Nueve Cerros, several different varieties of Unnamed Orange were identified (Dillon 1979:63-70)—Chubal, which is most closely related to Baclam Orange (see descriptions for the Late Preclassic Baclam and Early Classic Serafin varieties above), Motzoil, Sachbil, Utzunquex, and Pechlebal. The differences are primarily on form and slip, but all are bowls with varying shades of orange slip. Bowls with medial or basal flanges and ring-bases are common. A general Classic-period type with a red slip was also identified, Cotebal Red (*Ibid.* 75-7), which is composed of shallow “pans” with incurving walls and a flaky, thick reddish-orange slip. Pumice temper dominates the collection.

At Tonina, Montic Red (Becquelin and Baudez 1984:231) is a type with brown paste that has both bowl and jar forms. The jars have a flaring neck that is between 3.8 and 4.2 cm tall and has a diameter of between 20 and 22 cm. The bowls have flaring, out-sloping, or incurving walls and a 20 cm diameter. Muchitel Red (*ibid.*:232) has a very dark red slip and a form that is either a jar similar to Montic or a large bowl with flaring walls and a diameter of 40 cm. A third preliminary type, Red Slip (*ibid.* 234) is an open bowl with a light red slip.

Several types are present in Alta Verapaz that approximate the surface decoration of the present sample. Coralillo Orange Matte has a cylinder form with a wall thickness of 5-7 mm and a pale orange slip. Chipilin is the dominant red there during this time period (see description below).

Further into the highlands, the Terminal Preclassic orange-slipped groups continue through the Early Classic (see description for Witz Orange above). Carolina Ware (Hatch 1997:162-4) and Prisma Ware (Ibid. 153-6) has a specular orange slip and are found at Kaminaljuyu. The latter is also found at Zacualpa (Wauchope 1975:115), and Hatch (1997) identified it with Ticon Orange at La Lagunita. The forms consist of comales, bowls, and jars.

Pita Incised is absent from the Southeastern Petén, but a related type, Buj Incised (see below) appears in the Petexbatun (Foias 1996:389-92) and Altar de Sacrificios (Adams 1971:43). The type does appear in the Dolores Valley (Laporte *et al.* 1993:84), with simple geometric designs on plates or bowls, or, occasionally, jars and cups.

At Tikal (Culbert n.d., Laporte 1989:223), Pita is a rare type that appears more like the Buj Incised (see below) in the present sample, being identical except in slip color to Lucha Incised. According to Laporte it appears at the end of Tzakol 2. In the Mirador collection (Forsyth 1989:66-7), it appears normally on jars, with thin, crude incisions around the neck, but the incisions are found on round bowls.

One sherd from this type was identified in the collection at Barton Ramie (Gifford 1975:182-3), a basal-flanged bowl with crude, concentric semi-circular incisions on the flange (reminiscent of the half-dots on Dos Arroyos bowls). A related type, Mahogany Creek Incised (Ibid.:161) was also found there, with horizontal lines and diagonal

hatching on the exterior of bowls and jars. This type was also identified in the Petexbatun (Foias 1996:413-4).

A related type, Yajuch Incised, is found at Salinas de los Nueve Cerros (Dillon 1979:168-9). It exists only on cylinder tripod vessels with a gritty, brownish-red paste and sand temper. The incisions are shallow and crude with unknown designs. Chipilin Red (Arnauld 1986:340-2, see description below) has pre-firing large or fine incisions with simple lines or curvilinear designs.

Buj Incised seems to be a regional southwestern Petén tradition, having been found only in Altar de Sacrificios (Adams 1971:43), the Petexbatun (Foias 1996:389-92), La Joyanca (399-401), and here, although a few sherds were also found in Maler's cave outside of Piedras Negras (Holley 1983:509-10). Buj is distinguished from Pita in two characteristics—a finer, more careful incision (identical to Lucha Incised) and wider lines (normally between 2 and 4 mm). The present sample is identical to Lucha Incised, although both Buj and Lucha have thinner incisions.

Fine incisions are found in the Águila group at Yaxchilan (López Varela 1989:87) and Tikal (Culbert n.d.), and are probably more closely related to this sample. For a general discussion of orange-slipped incised types, see the description of Pita Incised:Pita above.

Milpa Impressed is extremely rare, and has only been found in Uaxactun (R.E. Smith and Gifford 1966:159), Tikal (Culbert, n.d.), La Joyanca (Forné 2005:398-9), and the region presently under study. It appears to be simply normal Águila Orange vessels with fingernail impressions. A related, red-slipped type, San Herman Impressed (Gifford

1975:159-60), was found at Barton Ramie. It mostly consists of thumbnail impressions on the flange of basal-flanged bowls

Diego Striated is rare, and has only been identified here and at Tikal (Hermes 1984, Laporte 1989:223-4), where the sample is identical. Nitan Composite is a similar type established at Edzna (Forsyth 1983:73) and present in El Mirador (Forsyth 1989:67), Calakmul (Domínguez Carrasco 1994:57), and the Petexbatun (Foias 1996:387-9), although it is normally a basin and not a jar. It is also defined by striations on the exterior of the vessel, but the orange slip is only found on the exterior of the vessel which continues down to the base over the striations. The sample from the Petexbatun is more like the present sample—even though the orange slip covers the striations, jar forms predominate.

Chivic Composite (Forsyth 1983:75, 1989:67-8) is identical to Nitan outside of the Petexbatun with the addition of a red slip on the lip. Chubal Orange (Dillon 1979:63-5) has a variable orange, somewhat waxy slip but occasionally the exterior has horizontal or diagonal striations.

Smudged sherds in the *Águila* group have only been identified in the present sample, although there were a few bowls classified as Minanha Red in the Barton Ramie collection (Gifford 1975:156-9) with a black-smudged interior.

***Intraregional comparisons:*** This is a very wide-ranging type that is found in almost every context north of Hun Nal Ye. In all of the cave sites, there is a very strong preference for jar forms over anything else, although at Tres Islas they are almost non-existent (7% of the total sample). The next most common form in the caves and the most common at Tres Islas is a bowl, which has a slight preference for Z-angled bowls in

Candelaria and the eastern part of the San Francisco Hills and straight-walled bowls in the central part of the Hills and at Tres Islas. Rare forms are found in small quantities in different areas—drums (in the Candelaria Caves, cups (Candelaria and the central part of the San Francisco Hills), and “cache pots” in Candelaria and at Tres Islas.

In general throughout the region, there is a preference for rounded lips, followed by lips with an interior bevel. The temper is most commonly quartz in every area, followed by a calcite and quartz mix (the eastern part of the San Francisco Hills) or pure calcite (every place else). A small number of sherds have a volcanic temper in the caves south of Tres Islas.

Decorated sherds have a somewhat more restricted range than the unslipped sherds. Striations are rarest, appearing only in La Caoba Vieja, but all of the other decorations are found in the Candelaria system. Smudged and fine-incised sherds appear at Tres Islas, and both types of incision are found in the eastern part of the San Francisco Hills.

**Observation:** Defining this group has proved problematic for most people studying the Early Classic, and the fundamental question is whether the Early Classic Maya were trying to create distinct reds and oranges or were using a general red-to-orange slip. Forsyth (1989:61), based on the collections from the Mirador Basin and Edzna, believes that the intention was to create two different colors, but in the present region, there is no clustering around any particular type. I have followed Culbert (n.d.) and Laporte’s (1989:222) examples, modifying the type designation to include both oranges and reds.



In many regions, the Z-angle bowls are a marker of Tzakol 1, or the latter part of the Protoclassic subcomplex. In this region, it appears that this form lasts well into Tzakol 2 and perhaps even Tzakol 3.

As with R.E. Smith (1955, vol. 1:150, Smith and Gifford 1966:162) classification of San Clemente Gouged-Incised:Sam Clemente, I have decided to classify sherds as Buj if they are predominately orange-slipped, even though some examples fade to black on large portions of the exterior.

*Muqb'ilha' Group* (1% of the Early Classic sample)

**Ware:** Petén Glossy

**Complex:** Pel

**Sample:** 159 sherds and 3 modified sherds, of which 74 were subjected to a more detailed analysis. The sample includes 141 body sherds, 12 rims, 3 special bodies, 2 appendices, 2 necks, 1 rim-to-base sherd, and 1 unknown body part.

**Principal identifying modes:** 1) A very fine, highly-fired paste that clinks when struck; 2) a squat jar or bowl with 3) a bright, shiny orange slip.

**Paste:** The paste is thin and highly fired, creating a sharp “ping” when struck (identical to Tinaja Red:Aduana). The color varies from a light red (7.5R6/6) to a light, yellowish orange (5YR8/3 to 8/6), but tends to fall into the orangish red (10R5/8 to 6/8) to reddish orange (2.5YR5/6 to 7/4) spectrum. The temper is normally a fine (74%) to medium (15%) quartz, although there are a very small number of sherds with fine (3%), medium (1%), or badly sorted (1%) calcite, fine sand (4%), or a mixture of calcite and quartz (2%). There are normally black (66%) or red (11%) ferruginous inclusions, or

occasionally mica (3%) or charcoal (1%). Only 20% of the sample has a dark nucleus, which is normally thick and found in the center or in the interior half.

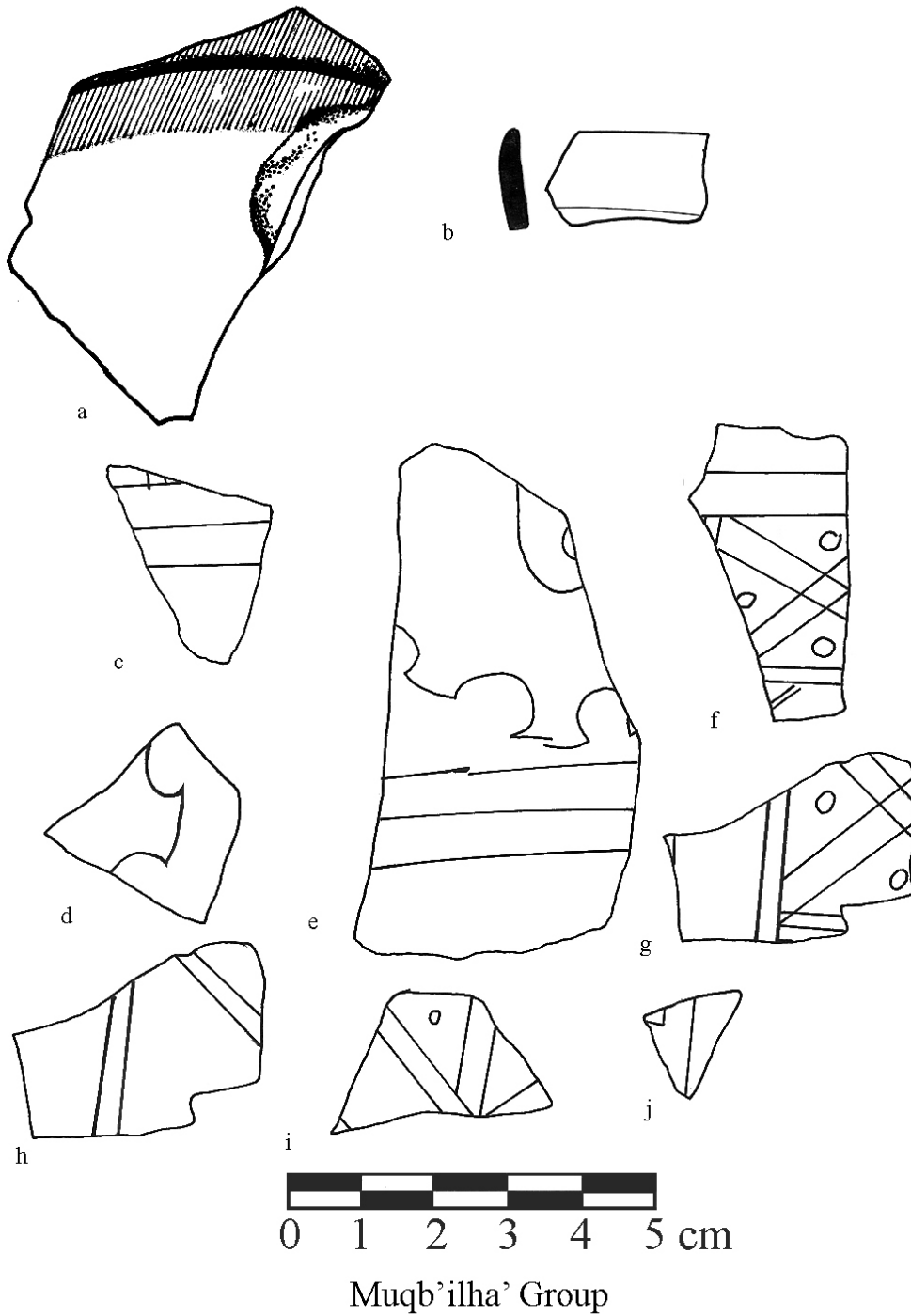


Figure 6- 19: Muqb'ilha' Group, a) Argentina Champfered:Argentina, b) Muqb'ilha' Orange:Muqb'ilha', c-j) Rosal Incised:Rosal

**Slip:** The slip is bright and shiny, and most commonly a light reddish orange (2.5YR5/8), although it varies from a slightly darker slip (2.5YR4/8) to one much lighter (7.5YR6/8). In this manner, the slip, like the paste, differs from Águila Red-Orange:Águila, although there are two examples where the color is an orangish-red (10R4/8 and 10R5/8). 12% of the sample has fire-clouding on the exterior of the vessel. The slip is most commonly found exclusively on the interior of the sherds (82%), but sometimes it is on both sides (14%), just the interior (2%) or on the interior and the upper part of the exterior (2%). There is a cream underslip on 27% of the sherds.

**Forms:** 6% of the sherds are of an unknown form

1) A squat jar (76%) identical to Águila Red-Orange:Águila with a rounded (67%) or interior beveled (33%) lip, a 4.5 cm neck height (3.3-5.8 cm), and a 14.3 cm height (9-21 cm). The diameter is 11.7 cm (9-14 cm), and the wall thickness is 4.3 mm (3.2-5.4 mm).

2) A general bowl or plate form (9%) with a rounded, pointed, or interior beveled lip and a 21 cm diameter (14-30 cm). The wall thickness is 4.3 mm (3.1-5.5 mm).

3) A bowl with slightly incurving walls (4%) and a 26 cm diameter. The lips have an interior bevel and the wall thickness is 3.9 mm (3.1-5.4 mm).

4) A cylinder (4%) with a wall thickness of 4.5 mm.

5) A curved Z-angle bowl (2%) with a wall thickness of 4.2 mm.

**Type:variety Designation:** This group is being established here, as are all of the types and varieties:

Muqb'ilha' Orange:Muqb'ilha'—142 sherds (figure 6-19 *b*) and 3 modified sherds

Rosal Incised:Rosal—6 sherds (figure 6-19 c-j)

Xam Smudged:Xam—3 sherds

Papa Dichrome:Papa—3 sherds

Chotal Fluted:Chotal—2 sherds

Argentina Chamfered:Argentina—6 sherds (figure 6-19 a)

Argentina Chamfered:ND/smudged interior—5 sherds

***Decoration:***

1) *Plain* (90%): The undecorated sherds are mostly squat jars, although a few bowls are also present.

2) *Incising* (4%): The incisions are well-done and fine with complex geometric patterns and are on bowls, cups, or jars. This type differs from Buj Incised:Buj in wall thickness and quality of the temper, although the execution of the incisions are on par with each other.

3) *Dichrome* (7%): The slip is an extremely bright and shiny orange (5YR4/6, 5/6, and 5/8) on one side and a glossy black on the other. Three different types and varieties have this decoration—Xam Smudged (orange exterior and black interior), Papa Dichrome (black exterior and orange interior), and Argentina Chamfered:ND/smudged interior. Both types occasionally have a cream underslip, and all sherds belong to bowls. The latter type probably should be included into the Balanza Group or given its own group designation, but since it is technologically identical to members of the Muqb'ilha' Group it has been placed into this group.

4) *Chamfering* (7%): The exteriors of several bowls have diagonal chamfers, and, at times, the interiors have also been smudged. There was some sort of protrusion, probably a leg or spike, on one of them.

5) *Fluting* (1%): Thin vertical flutes on an indeterminate bowl form

***Interregional comparisons:*** This group has only been identified in the present sample and in the Dolores Valley (Laporte, pers. Comm.. 2006). For a general discussion of orange-slipped types in the Early Classic, see the discussion for Águila Red-Orange above. It is possible that this type exists at other sites but was subsumed into either Águila or Tinaja Red:Aduana. It is identical to the latter in all but slip color.

A wide-spread ware throughout Mesoamerica, Thin Orange, has only superficial relations to this type—while it is thin with an orange surface, the orange often comes from the paste itself and the temper is, according to Anna Shepard, metamorphic rock (Kidder et al. 1946:193-201). The dating is roughly contemporaneous and is present during the strongest links with Teotihuacan.

Probable examples of Chotal Fluted appear in the Petexbatun (Foias 1996:393-4)—round or cylindrical bowls with very thin walls (between 3 and 6 mm) and, normally, vertical fluting. The paste is fine with calcite, or, occasionally, ash temper and a red or pink paste. Some examples of orange-slipped fluted bowls were also identified at Altar de Sacrificios (Adams 1971:48) but were identified as Paradero Fluted.

Chipilin Red (Arnauld 1986:340-2, see description below) occasionally has horizontal finger-made flutings on the exterior of a bowl form. The dichromes appear stylistically to be more related to the Chicanel and Peripheral Dichromes.

***Intraregional comparisons:*** The undecorated sherds are found in the central part of the region (the Candelaria Caves, the San Francisco Hills, and La Caoba Vieja), although there is a wider variety of modes in Candelaria.

The decorated sherds are found in the central part of the region—a cave in the Candelaria system (Ventana de Seguridad, CND-103) and another in the eastern part of the San Francisco Hills (CHO-402).

*Dos Hermanos Group* (less than 1% of the Pel sample)

***Ware:*** Petén Glossy

***Complex:*** Tzakol

***Sample:*** 1 body sherd and one rim-to-base sherds, both of which were subjected to a more detailed analysis.

***Principal identifying modes:*** 1) A red slip with black speckles; 2) a jar with 3) fine red paste and quartz temper.

***Paste:*** The paste is an orangish red (10R6/6 or 6/8) with fine or medium quartz temper and ferruginous inclusions.

***Slip:*** The exterior of both of the sherds has been slipped a light, orangish-red (10R5/8) with black speckles directly over the smoothed vessel surface

***Form:*** A jar form, probably like form 1 of Águila Red-Orange:Águila. The wall thickness is 6.5 mm (6.1-6.9 mm).

***Type:variety Designation:*** These sherds belong to a pre-established group:

Dos Hermanos Red:Dos Hermanos (R.E. Smith and Gifford 1966:157)

***Decoration:*** These sherds are undecorated.

**Interregional comparisons:** There is much debate concerning how to handle red-slipped vessels from the Early Classic. For a description of red-slipped vessels from the Early Classic, see the discussion for *Águila Red-Orange:Águila*.

**Intraregional comparisons:** These sherds come from the caves in the Candelaria system and the eastern part of the San Francisco Hills.

**Observation:** I separated these sherds from the *Águila* group on the basis of the black speckles, which are a defining characteristic according to Castellanos (pers. comm. 2004), in addition, they are identical to other examples of *Águila*. Culbert (n.d.) did not use this type designation, as the slip color fell into the range of *Águila*.

*Fama Group* (less than 1% of the Early Classic sample)

**Ware:** Petén Glossy

**Complex:** Tzakol

**Frequency:** 11 body sherds and 1 rim, 6 of which were subjected to a more detailed analysis.

**Principal identifying modes:** 1) A jar or bowl with 2) a light buff slip; 3) red or orange medium paste with calcite temper.

**Paste:** The paste has an orangish red (10R6/6 or 6/8) or light orange (5YR5/6 to 6/8) color. The temper is most commonly medium quartz (33%), although there are examples of fine sand (17%), fine quartz (17%), and fine (17%) and medium (17%) calcite. All sherds have black (67%) or red (33%) ferruginous inclusions. Three of the sherds have a dark nucleus.

**Surface treatment:** The vessels are slipped a light buff (5YR4/4 to 5YR7/4 and 7.5YR7/4). One sherd is slipped on both sides and the other only on the exterior.

**Forms:**

1) A squat jar (86%) like form 1 of Águila Red-Orange:Águila. The wall thickness is 5 mm (4.9-5 mm).

2) A slightly incurving bowl (14%) with a 14 cm diameter. The lip has an interior bevel and the wall thickness is 7 mm.

**Type:variety Designation:** These sherds were categorized as a single, pre-established type:

Fama Buff:Fama (R.E. Smith and Gifford 1966:158)

**Decoration:** These sherds have no decoration.

**Interregional comparisons:** Buff slip is rare in the Maya lowlands in the Early Classic, but this type has been found in Tikal (Culbert n.d.) and Uaxactun (R.E. Smith and Gifford 1966:158). The sample from Tikal is slightly lighter than here, and Culbert doubts that the slip color was intentional there or in at Uaxactun.

Two different potential types were identified at Tonina (Becquelin and Baudez 1984:234), Light Brown Slip and Cream Slip. The former is a cylindrical tripod vessel and the latter is a jar with a tall, flaring neck.

Two general Classic-period types are found in Alta Verapaz—China White (Arnauld 1986:335-6) and Mozote Cream (ibid.:347-8). The former has a poorly-smoothed slip with either a vertical-necked jar or a bowl with sloping walls. The latter has a very smooth slip on a general bowl form.



***Intraregional comparisons:*** All of these sherds come from caves in the central part of the region—the Candelaria system and the eastern part of the San Francisco Hills.

***Observation:*** It is possible that these were simply badly-fired Águila Red-Orange vessels.

*Pucte Group* (122 sherds, 1% of the Early Classic sample)

***Ware:*** Petén Glossy

***Complex:*** Tzakol

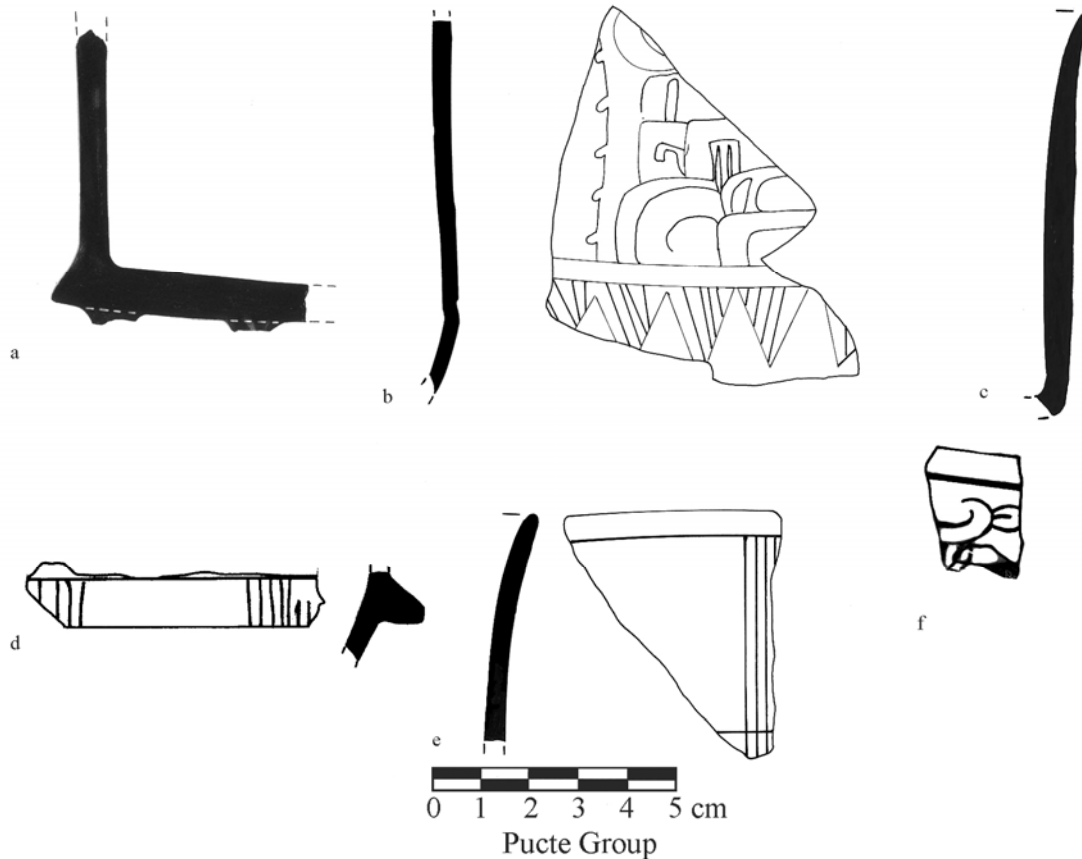
***Sample:*** 122 sherds. 48 were subjected to a more detailed analysis. The sample included 89 body sherds, 23 rims, 8 bases, and 2 special bodies.

***Principal identifying modes:*** 1) A jar, cylinder, or bowl form; 2) brown or tan slip; 3) red or orange paste with quartz or calcite temper.

***Paste:*** Like Águila Red-Orange:Águila, there is a high variation in color present in the sample, from a dark red (7.5R6/6) to a light orange (5YR8/4), although most of the sherds have a reddish orange (10R5/4 and 5/6) or orangish red (2.5YR6/4 and 6/6) color. The temper is most commonly fine (54%) or medium (21%) quartz, fine calcite (12%), or a mixture of quartz and calcite (10%). Fine sand (1%), large quartz (1%), medium calcite (1%), or badly sorted calcite (1%) are lesser alternatives. There are normally black (36%) or red (37%) ferruginous inclusions, occasionally with mica mixed in. When present (45% of the time), the dark nucleus is normally thin.

***Slip:*** The brown slip is highly variable, from a dark reddish brown (10R3/2 to 6/6) to a dark orangish tan (5YR 4/4 and 5/4). Only one sherd has a cream underslip. Most of the sherds are slipped only on the exterior (55%); the rest of the sample is slipped on both

sides (27%) or only on the interior (14%). Bases (3%) have slip on both the interior and exterior sides, and 1 sherd is slipped on the interior and the upper part of the exterior.



**Figure 6- 20: Pucte Group, a, c) Pucte Brown:Pucte, b, d-e) Santa Teresa Incised:Santa Teresa, f) Unnamed Gouged-Incised**

**Forms:** 2% of the sherds are of an unknown form.

1) A squat jar (48%) like form 1 of *Águila Red-Orange:Águila* with a coke-bottle base. The wall thickness is 6.4 mm (3.4-11 mm).

2) A round bowl with a slightly incurving rim (15%), a 24 cm diameter, and a wall thickness of 5 mm (3.5-7.4 mm).

3) A general bowl form (19%) with a rounded, pointed, or interior beveled lip and a ring base. The diameter is 24 cm, and the wall thickness is 4.7 mm (4.3-5.1 mm).

4) A cylinder (4%) with a rounded lip, a wall thickness of 4.1 mm (4-5.6 mm), and a 13 cm diameter.

5) A general cup form (4%) with a rounded lip, and, in one example, with an interior bolster. The diameter is 17.5 cm (11-24 cm), and the wall thickness is 5 mm (3.7-5.7 mm).

6) A cylinder with hollow or slab feet (3%) and a wall thickness of 5.8 mm.

7) A bowl with sloping walls (3%) and, in one example, a coke-bottle base. The rim is squared or interior beveled and has a diameter of 17.5 cm (17-18 cm). The wall thickness is 6.3 mm (5.7-6.9 mm).

8) An Early Classic basal-flanged bowl (1%) with a wall thickness of 6.6 mm.

***Type:variety Designation:*** Three established types and two new ones could be identified:

Pucte Brown:Pucte (R.E. Smith and Gifford 1966:161)—103 sherds (figure 6-20 a, c)

Santa Teresa Incised:Santa Teresa (Gifford 1976:169)—12 sherds (figure 6-20 b, d-e)

Unnamed Gouged-Incised—1 sherd (figure 6-20 f)

Chorro Fluted:Chorro (Gifford 1976:170)—5 sherds

Unnamed Plano-Relief—1 sherd

***Decoration:***

1) *Plain:* The undecorated sherds correspond to each of the forms present in the group.

2) *Incised*: The incisions are fine, like Lucha Incised:Lucha (see below) and Buj Incised:B'oj (see above), and range from simple geometric designs to figures, with one representing a pseudoglyph. Half of the sample has dark fire-clouding on the exterior. This type of decoration appears on jars, cylinders, cups, and bowls, including the one example with a basal flange.

3) *Gouged-incised*: A complex design which might be a world tree was gouged and incised into the exterior of the vessel.

4) *Fluting*: Wide vertical flutes were placed on the exterior of a round bowl.

5) *Plano-relief*: The sherd is too small to determine the design, which is found on the exterior of a general bowl form.

***Interregional comparisons:*** Pucte Brown has been found in several parts of the Maya world. At Altar de Sacrificios, all of the examples are lids with a reddish-brown paste and sand temper, often with mica showing in the slip. In the Dolores Valley (Laporte *et al.* 1993:85), Pucte Brown is normally a plate, although there is a single example of a jar.

At Tikal (Culbert n.d., Laporte 1989:226), the majority of the vessels are jars (in Culbert's sample) and bowls with round or straight-walled bowls, sometimes with a basal flange (in Laporte's sample, which which was found in funerary contexts). Culbert believes that some of the vessels might be misfired examples of Balanza Black, but that others were intentionally slipped brown.

At Piedras Negras, Pucte Brown has a carbonate, pinkish paste. Forms are most commonly basal-flanged tripod bowls with a wall thickness of 8.3 cm and an interior bevel on the lip. Round bowls, jars, and tripod cylinders are also present. At Barton Ramie (Gifford 1976:167-8), the type consists of mostly bowls or dishes, although jars

are present. Some vessels are mottled orange. Quartz is the dominant temper. The walls are between 2 and 7 mm

Caxlan Brown continues into the Early Classic at Salinas de los Nueve Cerros (Dillon 1979:92-3) and is described above in the discussion for Boxcay Brown. At Tonina, a potential light brown type, "Light Brown Slip" (Becquelin and Baudez 1984:234) is defined by a form that is present in this sample, a cylindrical slab-footed tripod vase with vertical walls and a flat base. The diameter is 18.5 cm, and the height is 15.2 cm including the 2.5 cm feet.

Chichicaste Brown (Arnauld 1986:337-40) is a general Classic period type in Alta Verapaz. See description in the Late Classic chapter for a full discussion, as well as a comparison to other Early and Late Classic brown-slipped types.

Santa Teresa Incised is found at Tikal (Laporte 1989:226) in limited quantities and consists of round bowls or basal-flanged bowls. At Barton Ramie (Gifford 1975:169-70), this type consists of round bowls, cylinders, and jars. Incisions are normally simple. There is a small sample of this type in the Dolores Valley (Laporte *et al.* 1993:85), with simple geometric designs on plates.

A rare, related type at Piedras Negras (Holley 1983:506-7), Ka Incised, has an orange or pink paste with fine or medium calcite temper. Incisions are pre-slip and have simple designs. Only tripod cylinders and bowls are found. The thickness is between 4 and 8 mm, and the bowl diameter is 14-26 cm.

Chabil Incised (Dillon 1979:173-5) is found at Salinas de los Nueve Cerros and appears around the Early-Late Classic transition (Tzakol 3 and Tepeu 1). It consists of thin-walled, incurving bowls with rounded lips and coke-bottle bottoms. The slip is

variegated, and incisions are normally complex (many figure profiles and quasi-glyphic designs) and appear between incised bands. The paste is red to orange with fine or medium sand temper.

An undesignated type at Tonina (Becquelin and Baudez 1984:235-6), Incised Brown Slip, consists of open bowls and tripod vessels with vertical or slightly concave walls. The designs span from lines to simple geometric designs. The open bowls have a diameter of just over 18 cm. For a description of general Classic-period incised types from Alta Verapaz, see description of the Chichicaste group (chapter 7).

Gouged-incised decoration in this group have only been identified in the present sample, although San Clemente Gouged-Incised, a member of the Águila Group, is found in small quantities in many parts of the Maya world.

Two non-designated types are found at Tonina (Becquelin and Baudez 1984:235 and 236), “Brown-Red Slip, Gouged and Incised” and “Brown Slip, Gouged and Incised.” The former is a rounded bowl with a 7 cm thickness and a 26 cm diameter. Designs are curvilinear. The latter is part of a slab-footed tripod vessel with gouged and incised volutes.

Fluting on brown-slipped vessels is very rare in the Maya World, with examples only at Barton Ramie (Gifford 1976:170), Tikal (Laporte 1989:226-7), and the present sample. The type normally consists of sloping-walled plates at Tikal and tripod cylinders at Barton Ramie. Some brown-slipped fluted bowls were reported at Altar de Sacrificios (Adams 1971:48) but classified as Paradero Fluted.

Plano-relief is also rare in the Maya world, but present with a black slip (Delirio Plano-Relief) in the Petexbatun (Foias 1996:403-6), Tikal (Culbert n.d.), Uaxactun (R.E.

Smith and Gifford 1966:157), Seibal (Sabloff 1975:112), Mayapan (R.E. Smith 1971:141), and Becan (Ball 1977:101). At Altar de Sacrificios, San Roman Plano-Relief (Adams 1971:51) is very similar to Delirio, with the addition of red cinnabar.

***Intraregional comparisons:*** This group is found from caves throughout most of the central part of the region—the Candelaria system, the San Francisco Hills, and the Sierra Chinaha. Both the plain and the incised sherds have this wide range. The gouged-incised sherd was found in the San Francisco Hills, and the fluted and plano-relief sherds are from the Candelaria system.

***Observation:*** Unlike sherds and vessels from the Chichicaste group, I am unconvinced that the Pucte group sample was actually intentionally slipped brown (except for the Unnamed Gouged-Incised sherd), due to the wide variation of color present. Many are likely badly-fired Águila Orange:Águila or even Balanza Black:Balanza vessels.

*Balanza Group* (2% of the Early Classic sample)

***Ware:*** Petén Glossy

***Complex:*** Tzakol

***Sample:*** 278 sherds, 3 sherds from miniature vessels, and 1 whole vessel, of which 159 were subjected to a more detailed analysis. The sherds included in the sample are bodies (158), bases (59), rims (44), special bodies (12), appendixes (5), and rime-to-base sherds (4 sherds).

***Principal identifying modes:*** 1) A jar, bowl, or cylinder with 2) an irregular black slip; 3) fine, red or orange paste with calcite, quartz, or sand temper.

**Paste:** The color is highly variant, from a dark red (7.5R5/6) to a light yellowish orange (7.5YR7/3), although it is most commonly an orangish red (10R5/6 to 6/6). The temper is most commonly fine (56%) or medium (19%) quartz, although fine (12%), medium (4%), or large (1%) calcite; fine (3%) to medium (1%) sand; a mixture of calcite and quartz (1%), and volcanic ash (2%) were also occasionally used. There are normally black (53%) or red (22%) ferruginous inclusions, occasionally with mica mixed in with them. There is a black nucleus present in 60% of the sample, which is normally thick. 5% of the sample has sherds completely reduced to black.

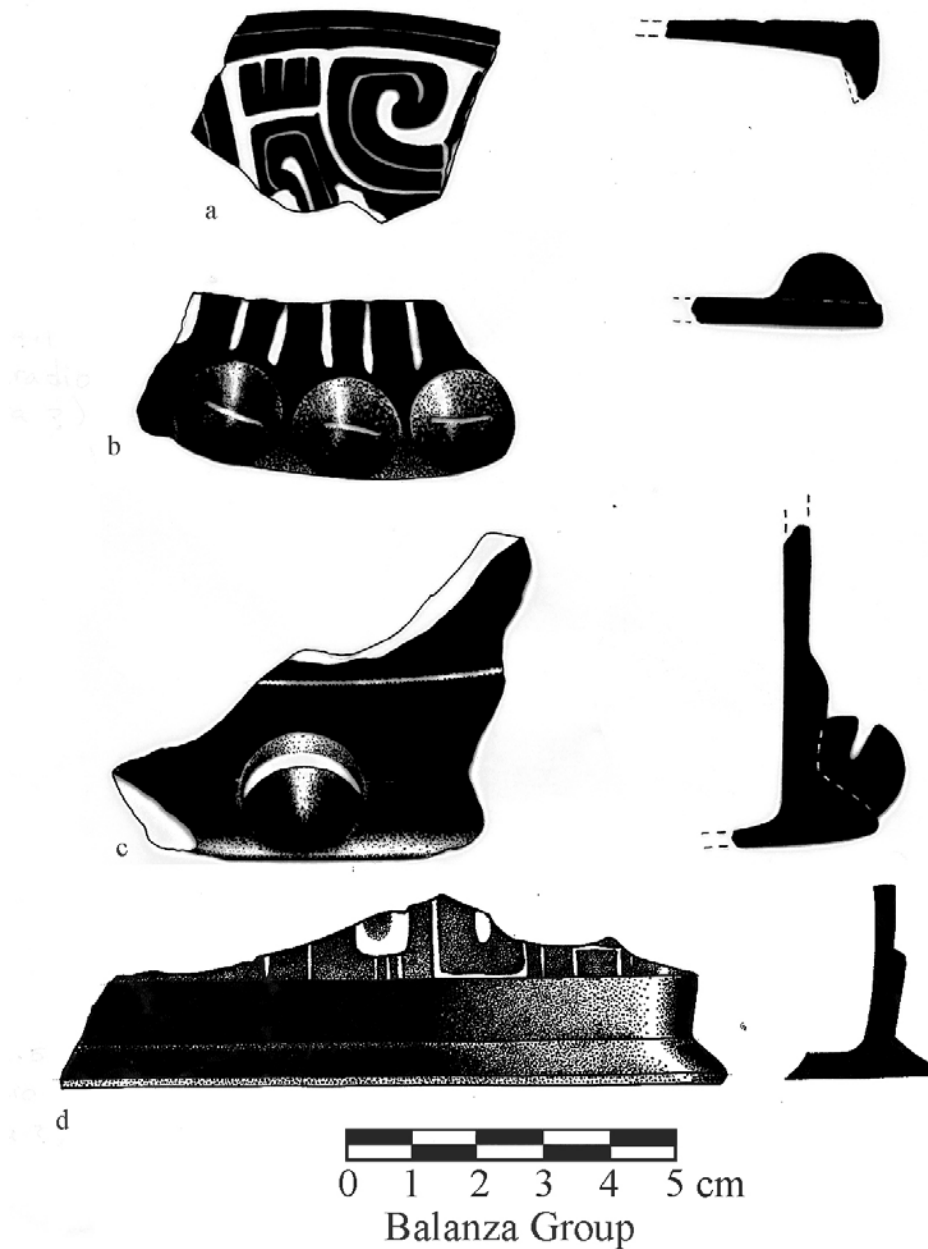
**Slip:** The slip is a glossy black that often mottles to tan or red. A few examples have an underslip, either cream (2%) or white (less than 1%). The sherds are normally slipped on both sides (44%), including the base (only 1 base is unslipped), and it is slightly more common to have interior slipping (28%) than exterior slipping (24%). 5% of the sample is slipped on the interior and the upper part of the exterior.

**Forms:** 4% of the sample is of an unknown type.

1) A general bowl form (45%) with rounded (33%) or pointed (67%) lips; a coke-bottle (2%), ring (96%), or pedestal (2%) base; and a 17 cm (16-18 cm) diameter. The wall thickness is 6.3 mm (4.9-10.6 mm)

2) A squat jar (21%) identical to form 1 of Águila Red-Orange:Águila with rounded (29%), squared (43%), pointed (14%), or interior beveled (14%) lips. The diameter is 12.6 cm (10-16 cm) and the wall thickness is 6.1 mm (4.3-11.4 mm).





**Figure 6- 21: Balanza Group, a, e) Urita Gouged-Incised:Urita; b) Unnamed Composite; c) Santizo Appliqué:Santizo**

3) A round bowl (12%) with slightly incurving lips and a rounded (79%), squared (7%), pointed (7%), or interior beveled (7%) lip. One example has a ring base. The diameter is 17.8 cm (10-30 cm) and the wall thickness is 5.2 mm (3.5-8.8 mm).

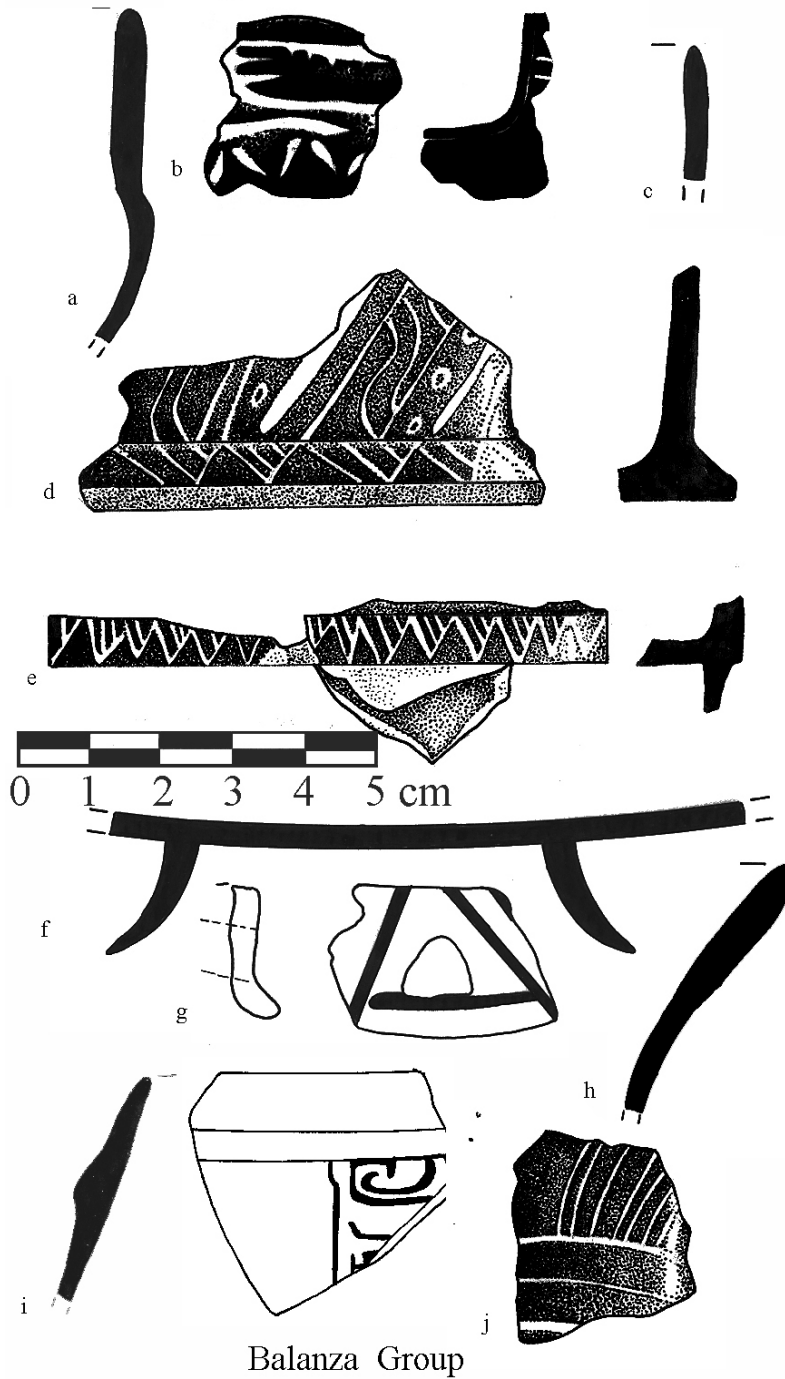


Figure 6- 22: Balanza Group, a, c, g-h) Balanza Black:Yaal; b, i) Positas Modeled:Positas; d) Urita Gouged-Incised:Urita; e, g, j) Lucha Incised:Lucha; f) Balanza Black:Discordia

4) A cylinder (5%) with a rounded lip. The diameter is 16 cm (12-20 cm), and the wall thickness is 6 cm.

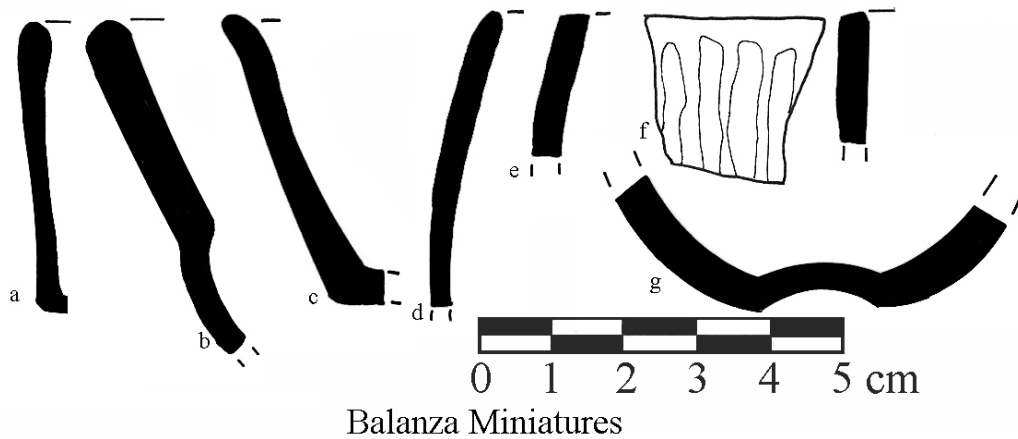
5) A straight-walled bowl with a large basal flange (4%) 5.1 cm (3.9-5.9 cm) below the rounded (50%) or interior beveled (50%) lip. The diameter is 28.8 cm (19-38 cm), and the wall thickness is 6.6 mm (4.1-9.7 mm).

6) A general cup form (3%) with rounded lips and a 17 cm (16-18 cm) diameter. The wall thickness is 5.7 mm (4.2-6.7 mm)

7) A bowl with sloping walls (1%) and an interior bevel. The diameter is 23.3 cm (19-32 cm), and the wall thickness is 7.4 mm (7-7.9 mm).

8) A slab-footed cylinder vessel (1%) with supports that are 3.8 cm tall and basal molding. The wall thickness is 6.8 mm (4.5-10.5 mm).

9) A miniature cylinder (less than 1%) with a rounded base, a squared lip, a 7.8 cm height (5.8-9.8 cm), and a 6.5 cm diameter (5-8 cm). The wall thickness is 2.9 cm.



**Figure 6- 23: Balanza Group Miniatures, a-e, g) Balanza Black:Yaal; f) Chorro Fluted:Chorro**

10) A cup with flaring walls (less than 1%) and a rounded lip. The diameter is 9 cm, and the wall thickness is 6.2 mm.

11) A barrel (slightly bulging in the center, less than 1%) with a rounded lip and a 10 cm diameter. The wall thickness is 4.3 mm.

12) A straight-walled bowl with a curved Z-angle (less than 1%) 4.6 cm below the rounded lip. The diameter is 32 cm, and the wall thickness is 7.6 mm.

13) A lid to a bowl (less than 1%) with a wall thickness of 7.6 mm.

14) A concave lid with a 16 cm diameter and a wall thickness of 5.4 mm (5.2-5.5 mm).

15) A rounded bowl (or possible creamer) with a 2.3 cm flaring pedestal and a wall thickness of 4.5 mm.

**Type:variety Designation:** Most of the sherds belonged to established types:

Balanza Black:Yaal (R.E. Smith and Gifford 1966:154 established the type; the variety is established here, since I separate the appliquéd sherds from the plain ones)—227 sherds (figure 6-22 *a, c, g-h*) and 6 miniature sherds (figure 6-23 *a-e, g*)

Balanza Black:Discordia (Discordia was established as a group and type in a “Thin Black” ware by R.E. Smith and Gifford (1966: 157); Laporte (1989:225-6) classified it as a type in the Balanza group and Culbert (n.d.) subsumed it into the Balanza Variety of Balanza Black, as it is restricted to a specific form and only represents one extreme of the present wall thickness for the type. I have designated it a separate variety of Balanza for the present study (figure 6-22 *f*).

Lucha Incised:Lucha (R.E. Smith and Gifford 1966:159)—21 sherds (figure 6-22 *e, g, i*)

Urita Gouged-Incised:Urita (R.E. Smith and Gifford 1966:164)—7 sherds (figure 6-21 *a, e*; 6-22 *d*) and 1 complete vessel

Paradero Fluted:Paradero (R.E. Smith and Gifford 1966:160)—14 sherds

Positas Modeled:Positas (R.E. Smith and Gifford 1966:161)—2 sherds (figure 6-22 *b, i*)

Santizo Appliqué:Santizo (Laporte, pers. comm. 2006)—2 sherds (figure 6-21 *c*)

Unnamed Composite—1 sherd (figure 6-21 *b*)

***Decoration:***

1) *Plain* (83%): The undecorated material corresponds to 2 different varieties of Balanza—Yaal and Discordia; between the two, the major difference is the thickness of the vessel wall and the form. The unslipped vessel that was classified as Discordia is slipped a very glossy black, and the wall is 4.5 mm thick. It is a rounded bowl form with a 2.3 cm flaring pedestal. The Yaal variety was created for the purposes of this study because Smith and Gifford's Balanza variety was often appliquéd, which are classified as Santizo Appliqué:Santizo here.

2) *Incising* (7%): Careful incisions forming different geometric patterns were made on the exterior of the vessel. This decoration is found on cylinders (sometimes with cylindrical feet), bowls, cups, jars, and basal-flanged bowls.

3) *Gouged-incising* (3%): These sherds are decorated with gouging and incising, forming complex geometric designs or, in one example, a figure. The whole vessel has a fluted basal flange in addition to the other designs. This type of decoration is found on cylinders, a basal flanged bowl, a concave lid, and an incurved cup.

4) *Fluting* (5%): Several bowls and cylinders are slipped black on the interior and the exterior and have vertical fluting on the exterior.

5) *Modeled* (1%): One sherd was too small to determine the design; the other is modeled to represent a human or deity. This particular fragment shows a large, round belly which is partially covered by a thin hand.

6) *Appliqué* (1%): Simple spike or button appliqués on slab-footed cylinders.

7) *Red-filled, coarse incisions and appliqués* (less than 1%): A lid (likely to a cylinder) was slipped black on the exterior and decorated with a combination of appliquéd buttons and deep, post-firing incisions radiating out from its center, which were then filled with cinnabar.

***Interregional comparisons:*** Balanza is a very common, widespread type in the Early Classic, at Altar de Sacrificios (Adams 1971:24), Seibal (Sabloff 1975:107-8), Uaxactun (R.E. Smith and Gifford 1966:154), El Mirador (Forsyth 1989:71-3), Calakmul (Domínguez Carrasco 1994:73-6), La Joyanca (Forné 2005:410-1), Edzna (Forsyth 1983:76-7), Piedras Negras (Holley 1983:418-9), Yaxchilan (López Varela 1989:90-2), Barton Ramie (Gifford 1976:161-4), and in the Petexbatun region (Foias 1996:396-400) and the Dolores Valley (Laporte *et al.* 1993:85). It commonly has screw-head appliqués at Seibal (Sabloff 1975:107-8) and Uaxactun (R.E. Smith 1955), which here are moved into Santizo Appliqué (see description below). It is also present at Palenque, but as an import (Rands 1974:60-1).

The paste is normally carbonate, although sand temper dominates the collection at Altar de Sacrificios (Adams 1971:24). The paste is normally pink, red, or brown. A wide variety of forms are present at all sites, but most commonly bowls with round walls or basal flanges. Jars are less common but present. The wall thickness is normally

between 4 and 8 mm. All of the samples share the same uneven black slip described for the present sample.

Three related varieties of Unnamed Black are present at Salinas de los Nueve Cerros in the Early Classic (Dillon 1979:94-7—Lucum (Tzakol 3/Tepeu 1), Pacmal, and Jucucnac (both Tzakol 3). All are jars or bowl forms, occasionally with a basal flange (Jucucnac). Black-slipped types are not present at Tonina or in the northern highlands. At La Lagunita (Ichon and Arnauld 1985:148-9), Canuto Black is similar to Balanza. Melano Black (R. Viel 1983:515) is a related type in Copan.

Discordia is only reported at Uaxactun (R.E. Smith and Gifford 1966:157), Tikal (Laporte 1989:225-6, Culbert n.d.), and in the present sample, although identical pitchers (sometimes with black slip, but more commonly brown) were found by Kidder *et al.* (1946:186-7) at Kaminaljuyu, and appear to be almost ubiquitous in Early Classic tombs. They also reported pitchers at Zacualpa, Copan, and Teotihuacan.

Incised sherds are present almost everywhere that Balanza Black has been found—in the Petexbatun (Foias 1996:400-3), Tikal (Culbert n.d.), Seibal (Sabloff 1975:110), Altar de Sacrificios (Adams 1971:43), Calakmul (Domínguez Carrasco 1994:77), La Joyanca (Forné 2005:411-2), El Mirador (Forsyth 1989:73), Salinas de los Nueve Cerros (Dillon 1979:169-71), and Barton Ramie (Gifford 1976:164). It is present in the sample in Yaxchilan (López Varela 1989:92), although it was designated as Balanza Black.

The paste is normally pinkish with carbonate temper, but ash is present at several sites, including the Petexbatun and Uaxactun (where it is the majority of the sample). Sand is the dominant temper at Altar. The incisions are varied—they are normally

simple in the Southwestern Petén, although one sherd with a pseudoglyph was found in the Petexbatun. The cross-hatched triangles in the present collection are more closely related to examples found in the central Petén and Yaxchilan. Louisiana Incised (R. Viel 1983:515) is a related type at Copan.

Urita Gouged-Incised is present at several sites in the Maya lowlands—Uaxactun (R.E. Smith and Gifford 1966:164), Tikal (Culbert n.d., Laporte 1989:225), Calakmul (Domínguez Carrasco 1994:84), Seibal (Sabloff 1975:112), Altar de Sacrificios (Adams 1971:52), and in the Petexbatun (Foias 1996:406-8) and the Dolores Valley (Laporte *et al.* 1993:86), but outside of the central Petén only a few sherds of this type are found.

An additional black-slipped gouged-incised type was found at Salinas de los Nueve Cerros, Kaxon Gouged-Incised (Dillon 1979:189-90), and differs only in the texture of the slip, which is more waxy than glossy. Usurpar Gouged-Incised is a very closely-related type from Copan (R. Viel 1983:515-6).

Red-filled incisions and appliqués have only been identified together in the present sample, but it is possible that some of the Lucha Incised vessels were similar to this lid, as appliquéd buttons or “screw-heads” were often ignored in defining black-slipped types. A rare type at Altar de Sacrificios, San Roman Plano-Relief (Adams 1971:51), had cinnabar rubbed into lines, which is similar to the present sample. Cinnabar is also present in incised lines at Uaxactun (R.E. Smith 1955:199) in Tzakol 2 and 3 contexts. In the southeastern highlands, Ilopongo Red-Filled (Sharer 1978:37-8, Demarest 1986:59-67) is an incised type with brown or black glossy slip with “fugitive red” paint in the incisions. An Unnamed Red-Filled Incised type was identified in



Jutiapa (Bond 1989:63), although it was unslipped. Both of these types are Late Preclassic, however.

Paradero Fluted is relatively rare in the Maya lowlands but has been found at Uaxactun (R.E. Smith and Gifford 1966:160), Tikal (Culbert n.d., Laporte 1989:226), El Mirador (Forsyth 1989:73), Barton Ramie (Gifford 1976:170), Altar de Sacrificios (Adams 1971:48), and Piedras Negras (Holley 1983:532-3), and in the Dolores Valley (Laporte *et al.* 1993:86). The paste is normally pink or reddish-brown with a carbonate temper (except for the Altar collection, where sand dominates the collection) and normally consists of round bowls. At Tikal, El Mirador, Piedras Negras, and Altar there are also cylinders, presumed to have slab feet. Apron covers and jars are also present at Tikal in this type. At Copan, Surí Fluted is a related type (R. Viel 1983:516).

Positas Modeled was identified at Uaxactun (R.E. Smith and Gifford 1966:161) and has only been identified there and here, although molded handles for apron lids have also been found at Tikal (Laporte 1989:225).

Screw-head appliqués have been found predominately on slab-footed tripod vessels in the central Petén (R.E. Smith 1955), Seibal (Sabloff 1975:107-8), and the southeastern Petén (Laporte pers. comm. 2006) but were only separated from Balanza Black in the last assemblage. Two crudely-made slab-footed cylinder tripod vessels recovered from B'omb'il Pek, a cave near the Candelaria system, have anthropomorphic appliqués on the body and either a seated figure or a bird (possibly a macaw) on the lid (Dreux 1968:9).

***Intraregional comparisons:*** Both undecorated and incised sherds are found throughout the northern  $\frac{3}{4}$  of the region—nearly all sites, shrines, and caves between the Candelaria

system and Tres Islas, although the majority comes from the Candelaria Caves. The lip is predominantly rounded in every part of the region and is most variable in the Candelaria. The paste is most commonly quartz throughout the region, followed by calcite in Candelaria and the central part of the San Francisco Hills, sand in the eastern part of the Hills, and ash in Tres Islas. A small amount of ash temper is found in the central part of the San Francisco area.

Gouged and incised sherds were recovered from Candelaria, the San Francisco Hills, and (in the case of the whole vessel) from Tres Islas, while the rest of the decorated sherds were limited to caves in the Candelaria system.

The most common form in caves throughout the region is a general bowl form, followed by jars. In Tres Islas, the most common form is a basal-flanged bowl followed by a general bowl form; no jars are present in the sample. In La Caoba Vieja one example was found, a flaring-walled cup.

**Observation:** One of the defining characteristics of this group is the inconsistent black slip, which is somewhat variable on the same vessel due to a somewhat uneven firing.

*Tinaja Group* (2% of the sample)

**Ware:** Petén Glossy

**Complex:** Tzakol 3/Tepeu

**Sample:** 331 sherds, one ceramic disk, and 2 modified disks, of which 63 were subjected to a more detailed analysis. The sample includes 320 body sherds, 10 rims, and 1 base.

**Principal identifying modes:** 1) A jar with 2) an uneven, bright red slip and 3) a highly fired paste with quartz or calcite temper that makes a sharp “ping” when struck.

**Paste:** The color is variable, from red (7.5R5/6) to light orange (7.5YR6/6), although most commonly an orangish red (10R5/6 to 7/6) or orangish red (2.5YR5/6 to 6/6). The temper is most commonly fine (55%) or medium (33%) quartz, but less commonly fine or medium calcite, fine volcanic ash, or a mixture of fine or medium calcite and quartz. Black (66%) or red (18%) ferruginous inclusions are present in the majority of samples, occasionally with mica mixed in. A dark nucleus is present in 22% of the cases, which is evenly split between thin and thick widths.

**Slip:** The slip is a streaky, variable red, from dark red (7.5R3/6 and 3/8) to orangish red (10R3/4 to 6/8), and occasionally reddish orange (2.5YR4/8 to 5/8). The bowl is slipped on both sides, and the rest is slipped on the exterior and the interior to the base of the neck.

**Forms:**

1) An elongated jar (99%): The joint between the flaring neck and the body is a sharp angle with evidence of smoothing on the interior where the two pieces were joined together. The lip is rounded, and the diameter is 12 cm. The wall thickness is 4.6 mm (2.8-6.3 mm)

2) A general bowl form (1%): The wall thickness is 4.3 mm (4.2-4.4 mm).

**Type:variety Designation:** All of the sherds belong to the same type and variety:

Tinaja Red:Aduana (the type was defined by Smith and Gifford 1966) and the variety by Adams 1971:23)—it was originally a Late Classic Type, but Laporte (1989) reported that it was found in Tzakol 3 contexts at Tikal.

**Decoration:** These sherds are all undecorated.

***Interregional comparisons:*** This type has been identified at Tikal (Laporte, pers. comm. 2006) and at Altar de Sacrificios (Adams 1971:23). The form, paste, and slip are identical in all regions, except that the temper is fine sand at Altar. The type was used as a temporal marker at Tikal (Laporte pers. comm. 2006), as it appears around 460 AD. While Laporte makes the distinction between Tinaja and Aduana varieties, Culbert does not, and all Tinaja ceramics start at the beginning of the Ik complex, about 100 years later. The strongest sample from Tikal for the Early Classic, however, is Mundo Perdido (Culbert, pers. comm. 2005), so it is probable that the difference is based on sampling differences.

For a general discussion of Early Classic orange- and red-slipped types, see the description for *Águila Red-Orange:Águila* above, and for Late Classic, Tinaja Group ceramics, see the description for *Tinaja Red:Tinaja* below.

***Intraregional comparisons:*** This type was found in several caves in the Candelaria system, caves in the eastern part of the San Francisco Hills, La Caoba Vieja, and Tres Islas. The only variation in the region is the presence of a bowl form in the eastern part of the San Francisco Hills.

***Observation:*** *Tinaja:Aduana* was a crucial type for understanding the chronology of use of the Candelaria Caves. This variety marks the earliest appearance of the Tinaja Group around A.D. 470 and continues to be produced until the end of Tepeu. Most of the appearances of this type in the present collection, however, are mixed in with *Tzakol* ceramics and appear to date to the period between A.D. 460 and 550.

*Tinaja:Aduana* is easily distinguished from both *Aguila Orange-Red:Águila* and other varieties of Tinaja through its thin, highly fired paste (making a characteristic

metallic “ping” when struck with another sherd) and the streaky or mottled appearance of the slip.

***Playa Dull Ware***

*San Martin Group* (less than 1% of the Early Classic sample)

***Ware:*** Playa Dull

***Complex:*** Tzakol

***Frequency:*** 3 rims and 21 body sherds, of which 10 were subjected to a more detailed analysis.

***Principal identifying modes:*** 1) A jar with 2) a rough, orange slip and coarse calcite temper; 3) a rough tan slip.

***Paste:*** The paste is rough and powdery and most commonly a light orange (5YR6/4 to 8/4), although it is occasionally a reddish orange (2.5YR7/4 to 8/2). The temper is most commonly large calcite (50%), although it is occasionally medium (10%) or badly-sorted (20%) calcite, a combination of medium calcite and quartz (10%), or fine sand (10%). There are normally either black (67%) or red (13%) ferruginous inclusions. Only one example has a thick dark nucleus.

***Slip:*** A rough slip (which is only slightly more solid than a wash) was applied over the somewhat rough, powdery paste. The slip is tannish in color (2.5YR4/4 to 5/6, 5YR5/4 and 6/6, and 7.5YR5/4) and normally covers only the exterior of the vessel (83%), although it is occasionally slipped on the interior or both sides. 60% of the sample has dark fire-clouding on the surface.



**Figure 6- 24: San Martin Group, San Martin Variigated Brown:San Martin**  
**Form:** A general jar form similar to that of Quintal Unslipped:Quintal or Águila Red-Orange:Águila. The diameter is 28.5 cm (27-30 cm), and the wall thickness is 7.8 mm (4.2-11.7 mm).

**Type:variety Designation:** These sherds were all given the same type designation:

San Martin Variigated Brown:San Martin (Sabloff 1975:102)—24 sherds (figure 6-24)

***Distribution:*** Caves in the eastern part of the San Francisco Hills (CHO-3-4, 4-2, 4-3, and 9-1 and 3).

***Interregional comparisons:*** This is a highly localized group, appearing only in the present sample and at Seibal (Sabloff 1975:102-105). The form there is most commonly a jar with a flaring neck that is between 1.7 and 2.7 cm tall, although there are examples more like the present sample with a neck up to 5 cm tall. The lips are normally rounded, squared, or grooved, and the diameter is normally around 15 cm. The paste is variable—tan, pink, grey, or black, with either sand or calcite temper, which often shows through on the surface. There is often fire-clouding present. In addition to jars, bowls are present in Seibal, but not in the present sample.

***Intraregional comparisons:*** Due to the small sample size and the restricted area in which this type was found, none can be made.

***Observation:*** I was not able to see a sample of this type, so the identification is preliminary and based on the description by Sabloff.

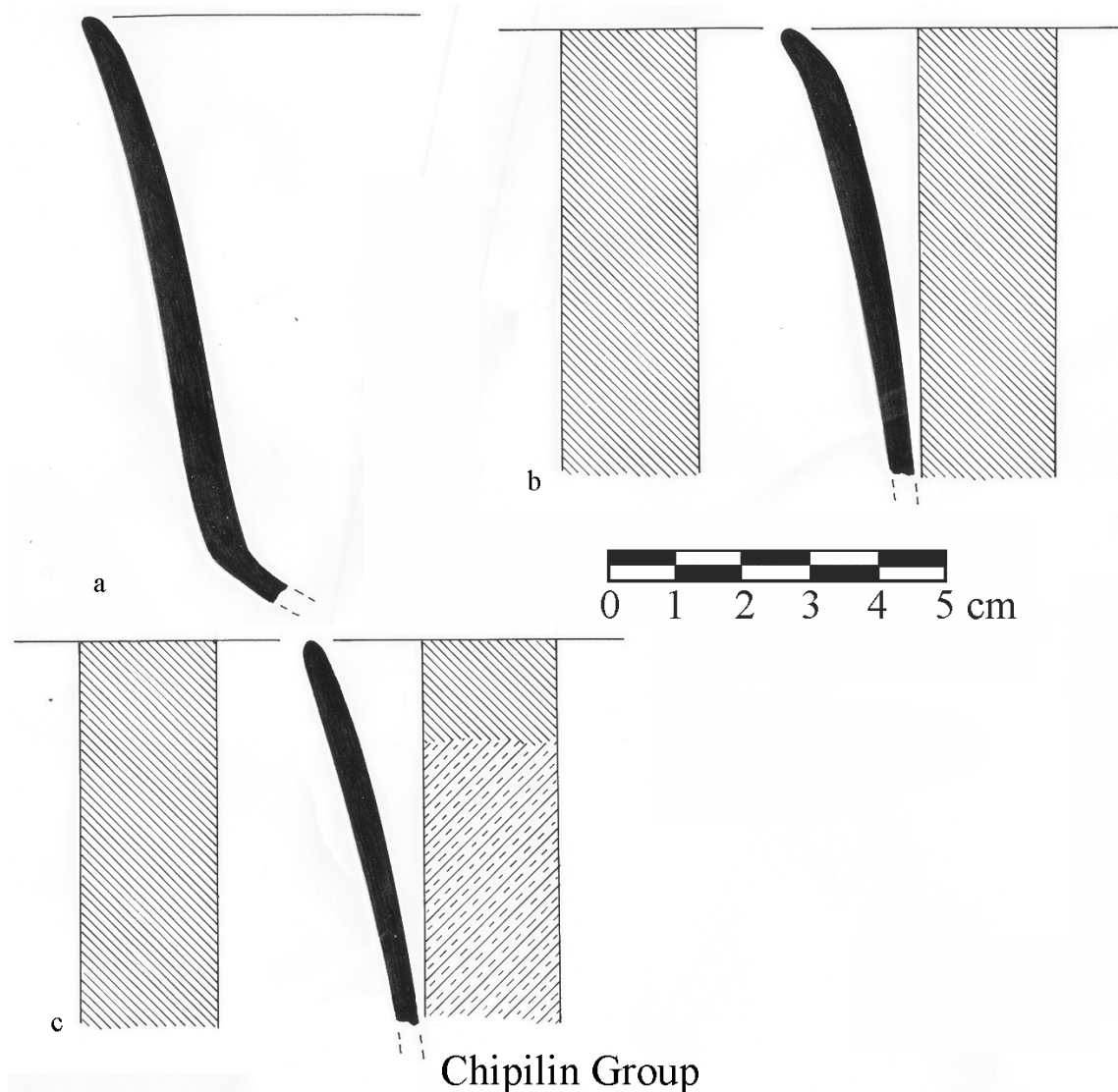
### ***Cahabon Flakey Ware***

*Chipilin Group* (31 sherds, less than 1% of the Early Classic sample)

***Ware:*** Cahabon Flakey

***Complex:*** Coban 1 (Early Classic)

***Frequency:*** 31 sherds. 21 were subjected to a more detailed analysis. The sample consists of 19 bodies, 4 rims, 4 special bodies, 2 appendices, and 2 rim-to-base sherds.



**Figure 6- 25: Chipilin Group, a-b) Chipilin Red:Chipilin, c) Chipilin Red:ND/cream interior**  
**Principal identifying modes:** 1) A bowl with 2) specular red slip and 3) a red paste with

quartz and ash temper.

**Paste:** The paste is consistently an orangish red (10R5/6, but occasionally 2.5YR6/4 and 2.5YR4/8), normally with a fine quartz (52%) or medium calcite (35%) temper, although occasionally fine ash (4%) or medium quartz (4%) or sand (4%) are used. There are normally mica (24%) or red ferruginous inclusions (71%) and, in one case, a thin dark nucleus.



**Slip:** A smooth specular red slip (most commonly 10R4/6, but with one example 7.5R3/4) was painted directly onto the vessel. One sherd is only slipped on the exterior; the rest are slipped on both sides (including bases).

**Forms:**

1) General bowl form (58%), in one case with a basal molding. The wall thickness is 4.9 mm (3.2-6.1 mm).

2) Bowl with sloping walls (35%) and a rounded or squared lip with a 20 cm diameter (18-23 cm) standing 11.3 cm. One of the examples has a basal flange. The wall thickness is 4.9 mm (4-5.6 mm).

3) Bowl with flaring walls (6%), a rounded lip, a 17.5 cm (17-18 cm) diameter, and a wall thickness of 5.8 mm (5-6.5 mm).

**Type:variety Decoration:** These sherds can be assigned to two different varieties of the same established type. One of the varieties is defined here.

Chipilin Red:Chipilin (Arnauld 1986:340)—21 sherds (figure 6-25 a-b)

Chipilin Red:ND/cream interior—10 sherds (figure 6-25 c)

**Decoration:**

1) *Plain* (68%): Undecorated sherds span all three forms.

2) *Dichrome* (32%): Dichrome decoration is only found on sloping-walled or indeterminate bowl forms. The exterior is slipped the same specular red, and the interior is a dull, orangish cream or beige (5YR7/4).

**Interregional comparisons:** This type has only been identified here and in Alta Verapaz (Arnauld 1986:340-2). There are sloping or incurving-walled bowls found in the sample, and vessel walls are between 4 and 12 mm thick. Diameter is between 14 and 34 cm.

Like the present sample, the slip is a specular red. The paste is orange, brown, or grey with pumice, mica, or quartz inclusions and often with a dark nucleus.

For a general description of red and orange-slipped sherds and dichromes in the Early Classic, see the discussion for Águila and Differentiated Color groups above.

***Intraregional comparisons:*** This group is limited to a single cave in the Candelaria system.

*Javiér Group* (less than 1% of the Early Classic sample)

***Ware:*** Cahabon Flakey

***Complex:*** Coban I

***Sample:*** 2 whole vessels.

***Principal identifying modes:*** 1) A cylinder with 2) a somewhat glossy, black slip, 3) simple geometric incisions, and 4) probably ash temper.

***Paste:*** Since both of the vessels are whole, the paste is unknown, but most likely had an ash temper.

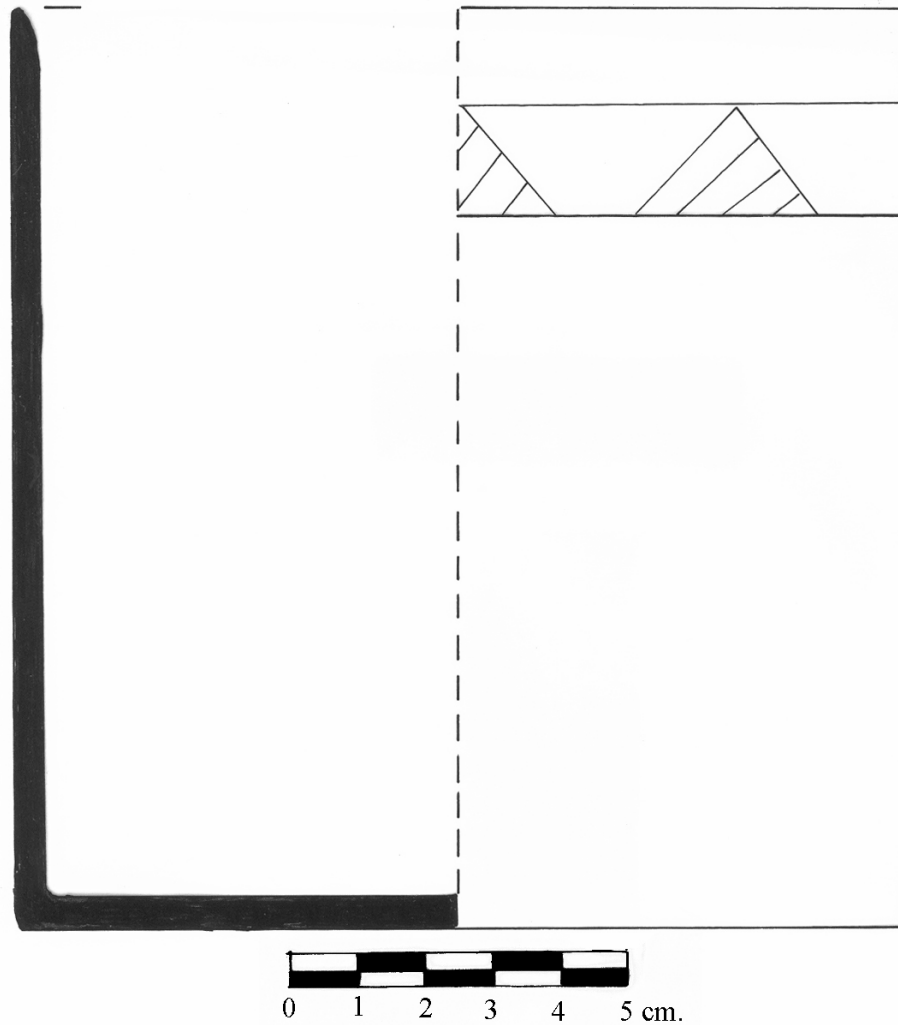
***Surface treatment:*** The slip is glossy and black.

***Form:*** A cylinder with vertical walls of an unknown width (they were placed underneath and behind several vessels cemented into the wall) with a deep interior bevel. The most visible cylinder had a height of 13.3 cm and a diameter of 13.2 cm.

***Type:variety Designation:*** The type and group are established here:

Javiér Incised:Javiér—2 whole vessels (figure 6-26)

***Decoration:*** Both of the vessels have fine-incisions forming a circumferential ring of incised, hatched triangles bounded by horizontal lines.



Javier Inciso

**Figure 6- 26: Javier Group, Javier Incised:Javier**

**Interregional comparisons:** Black-slipped wares are extremely uncommon in the highlands, although present in the Early Classic at Nebaj (A.L. Smith and Kidder 1951:71, Becquelin *et al.* 2001:253-4) and Zacaleu (Woodbury and Trik 1953:123, cited in Becquelin *et al.* 2001:253), where all of the forms are bowls with a ring-base or tripod supports. Incisions are occasionally present (horizontal or vertical lines), as are different types of impressions or fluting. The form is more related to Chichicaste Brown (see description below), a type that spans the whole Classic period in the northern highlands,

although the incisions are identical to many examples of Lucha Incised (see description below). They were most likely smudged on the interior and exterior.

***Intraregional comparisons:*** Both of the vessels come from the Cave of Hun Nal Ye.

***Observation:*** Both of these vessels were stolen before they could be completely studied.

*Cajeta Group* (less than 1% of the simple)

***Ware:*** Cahabon Flakey

***Complex:*** Pel

***Sample:*** 2 complete vessels

***Principal identifying modes:*** 1) A rectangular box with 2) a rough orange or tan slip and a flat lid.

***Paste:*** Unknown (whole vessel).

***Slip:*** The surface is an uneven orange or a light tan.

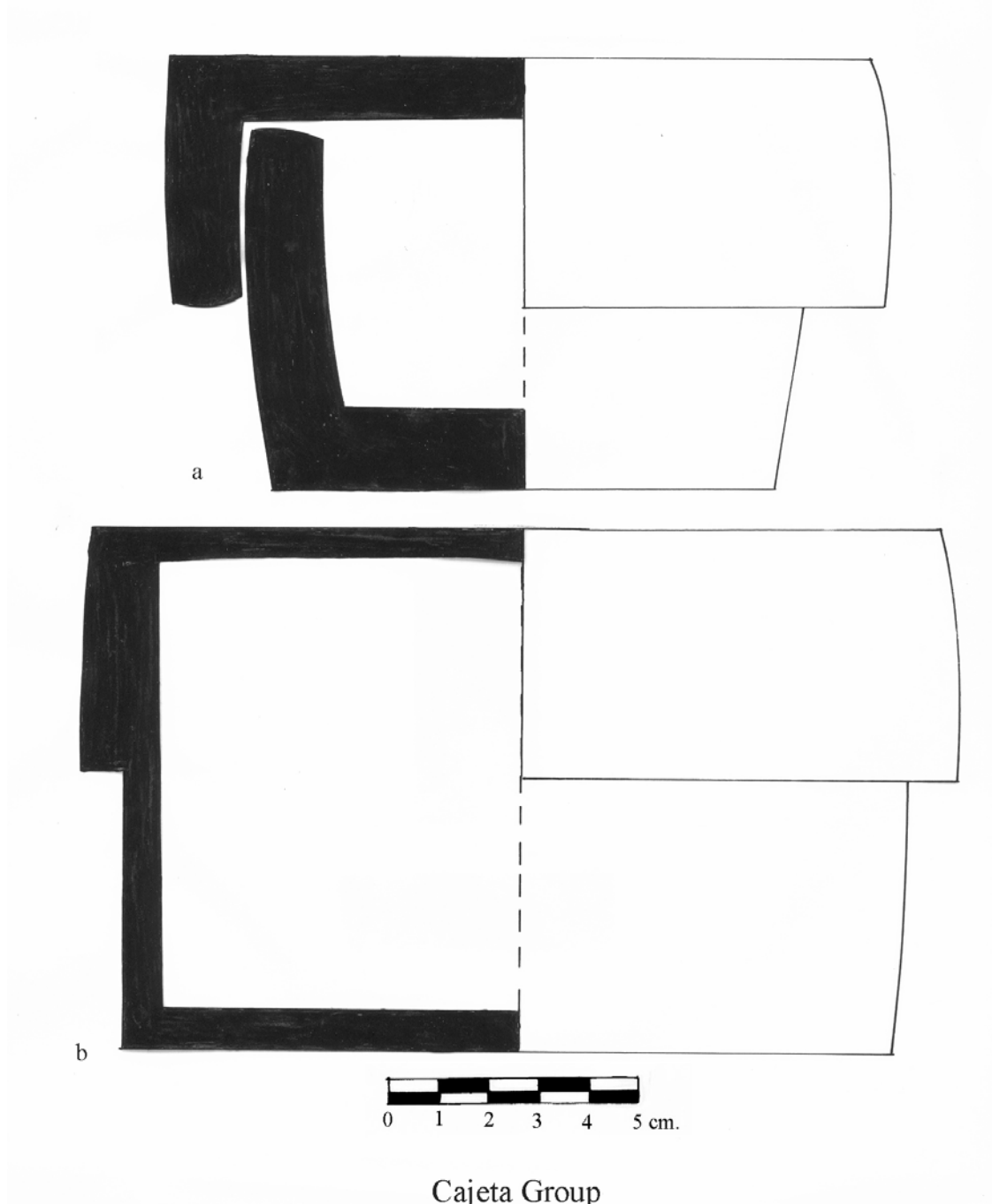
***Form:*** A “shoe-box” form. One vessel (HNY-V10) has thick walls and curved lips. The base is 29 cm long, 11.2 cm wide, and 8.6 cm tall. The lid is 32.6 cm long, 15 cm wide, and 5.3 cm tall. Together, the vessel is 10.2 cm tall. The second has a base that is 29.4 cm long, 14.3 cm wide, and 8.9 cm tall and a lid that is 32 cm long, 16.8 cm wide, and 4.3 cm tall. The lips are squared.

***Type:variety Designation:*** The group and type is established here:

Cajeta Orange:Cajeta—2 whole vessels (figure 6-27 *a-b*)

***Decoration:*** Both of the vessels are undecorated.

***Interregional comparisons:*** Ceramic boxes are rare but present in some parts of the Maya world. Morley (1935) recorded several examples underneath Early Classic stelae



**Figure 6- 27: Cajeta Group, a-b) Cajeta Orange:Cajeta** at Quirigua, which are very similar to the present sample in size and form (pers. obs. 2006). Ixobel Orange boxes have been found at Aguateca (pers. obs. 2005) and at Ixcun (Laporte, pers. comm. 2006), but have the diagnostic “hook-lip” for the type (see discussion above). At Caracol, The Chases reported a ceramic box as well (A. Chase and

D. Chase 1997). This box was more similar to the stone box at Hun Nal Ye, with the molding on the interior of the lip on the body and the exterior of the lip on the lid so the lid interlocked with the body instead of slipping over it. Both this and the box from Quirigua have a similar orange slip.

At Copan, Sepultura Unslipped (Willey, Leventhal, et al. 1994:84-91) very rarely has a box form. Unlike Cajeta and other related types, it is a cube with each side averaging 17.25 cm. The lid, which has the same length and width, simply sits atop it and is decorated with 2 appliquéd serpents heads on opposite sides accentuated with blue paint.

***Intraregional comparisons:*** These boxes were found in the Cave of Hun Nal YE.

Similar ceramic boxes are found at the hilltop shrine of Ub'ub' (Woodfill, Ramírez, and Hurtado 2003), although they are much smaller and have either a tan slip or a smoothed, apparently unslipped surface.

*Puñazo Group* (less than 1% of the sample)

***Ware:*** Cahabon Flakey

***Complex:*** Pel

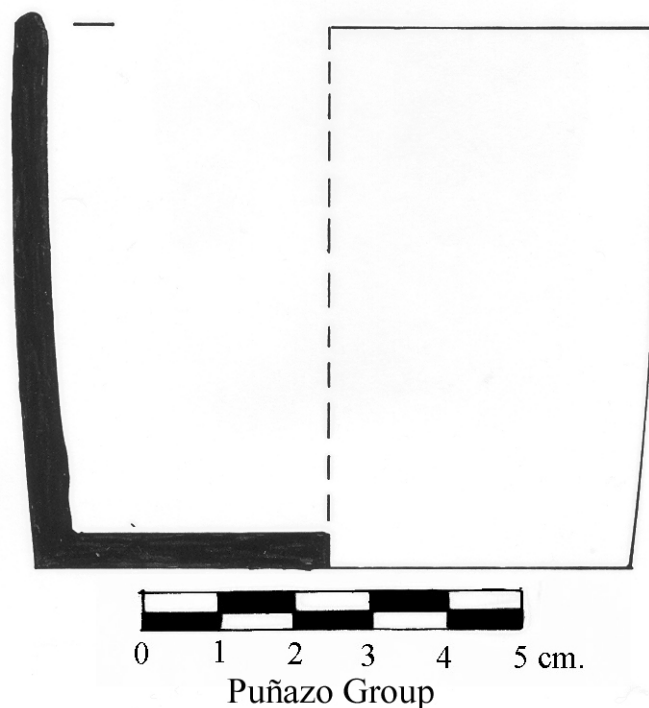
***Sample:*** 4 complete vessels

***Principal identifying modes:*** 1) miniature cup with 2) a smooth orange slip.

***Thickness:*** Unknown

***Paste:*** Unknown (whole vessel).

***Slip:*** The slip is a smooth, burnished orange.



**Figure 6- 28: Puñazo Group, Puñazo Orange:Puñazo**

**Form:** A small cup with straight walls and a flat base. The height is 7.6 cm (7-8.5 cm), and the diameter is 7.5 cm (6.2-8.6 cm). The vessels were hastily made, and the walls, lips, and bases are uneven.

**Type:variety Designation:** The group and type are established here:

Puñazo Orange:Puñazo—4 complete vessels (figure 6-28)

**Decoration:** The vessels are all undecorated.

**Interregional comparisons:** For a general discussion of Early Classic-period orange wares, see the description for *Águila* above. An identical cup dating to the Early Classic was found at Nebaj (A.L. Smith and Kidder 1951:68, fig. 73u) that was completely slipped, although the base and interior were less glossy than the exterior.

**Intraregional comparisons:** All of the vessels were found in the Cave of Hun Nal Ye.

## **Polychromes and Bichromes**

### ***Paso Caballo Ware***

*Caramba Group* (less than 1% of the Early Classic sample)

***Ware:*** Paso Caballo Waxy

***Complex:*** Chicanel

***Sample:*** 1 complete vessel and 2 body sherds, all of which were subject to further analysis.

***Principal identifying modes:*** 1) A bowl with a 2) thin, waxy, orange, red, and black slips; 1) a very soft, light red paste with quartz temper.

***Paste:*** The paste is a light red (10R6/6) or reddish orange (2.5YR6/6) with fine quartz temper and ferruginous lumps. One of the sherds is reduced to black, and another has a thin dark nucleus. The whole vessel has an extremely soft paste, much like Sibales Red.

***Slip:*** There are 2 different colored slips on each of these vessels--orange (2.5YR3/6 to 5YR5/6) and red (7.5R4/6 to 10R6/6) and black. There is fireclouding on one example. The sherds are slipped only on the exterior, while the whole vessel is slipped on the interior and the exterior between the rim and flange.

***Form:***

- 1) A general bowl form with a wall thickness of 6.7 mm.
- 2) A probable general jar form with a wall thickness of 6.7 mm.
- 3) A plate with a flat base and a medial ridge 2 cm below a rounded lip. The vessel had a 30 cm diameter and stood 8.1 cm tall. The wall thickness is 8.4 mm.

***Type:variety Designation:*** The whole vessel is an Early Classic variety of a Late Preclassic type, while the 2 sherds do not match any extant type and are defined here.



Metapa Trichrome:ND/thin slip (Culbert n.d.)

Unnamed Polychrome

***Decoration:***

1) *Polychrome*: Atop the orange primary slip simple designs were made in red and black. The polychrome decoration is obviously imitating Dos Arroyos group ceramics, but the slip is waxy and burnished, which precludes their incorporation into this category. Since there are no true polychromes before the glossy wares, I have dated these sherds to the Early Classic.

2) *Trichrome*: The whole vessel is a bichrome with a red-slipped exterior from the lip to the base of the flange and an orange-slipped interior, over which wavy parallel lines were painted with something that approximates a long comb.

***Interregional comparisons:*** This type is rare, only being found at Altar de Sacrificios (Adams 1971:28-9) and Tikal (Culbert n.d.). Adams suggests that at Altar the type is imported, as it is a non-local temper (possibly volcanic). The range of wall thickness at Altar is smaller than the present sample (4-8 mm). The type appears in Late Plancha there. The polychrome sherds have no equivalents in the Maya highlands or lowlands.

***Intraregional comparisons:*** The whole vessel was found in a cache in Cerro Ávalo and the sherds were found in caves in the San Francisco Hills.

***Observation:*** The soft paste and thin, fragile slip of the whole vessel is only reported found in Sibales Red:Sibales outside of the region of study. While it is surely more widespread (judging by this sample), these modes do seem to primarily focus on this type. At La Joyanca, at least, they do not stray from Sibales.

## **Petén Glossy Ware**

*Actuncan Group* (less than 1% of the Early Classic sample)

**Ware:** Petén Glossy

**Complex:** Tzakol 1

**Sample:** 1 rim and 6 body sherds. 6 were subjected to a more detailed analysis.

**Principal identifying modes:** 1) A bowl with flaring walls and a curved, down-sloping basal flange; 2) abstract designs done in red and black over a light orange slip; 3) orange or red paste with quartz temper.

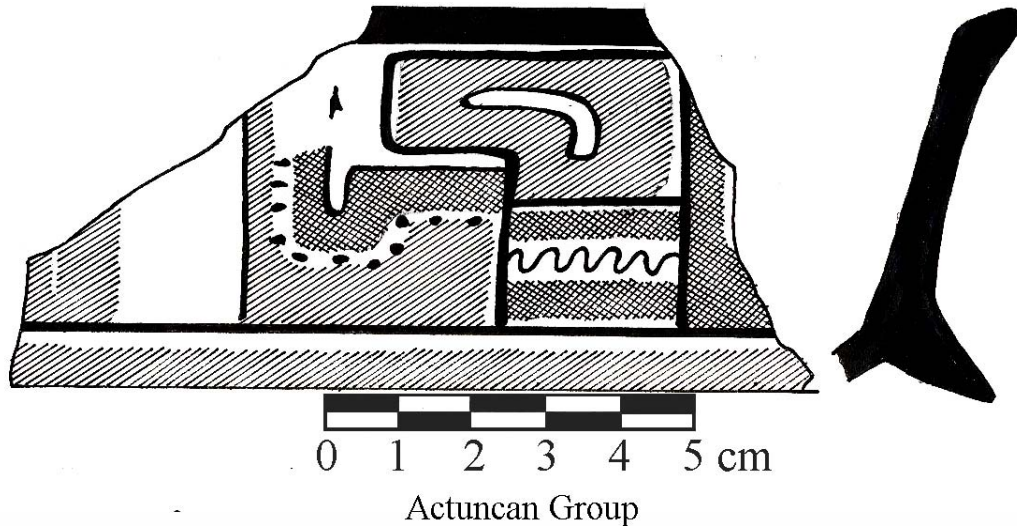
**Paste:** The color is normally a reddish orange (2.5YR5/7 to 7/6), although it is sometimes an orangish red (10R4/3 and 6/8) or a light orange (5YR6/6). With the exception of one sherd with fine volcanic ash temper, every example has a fine or medium quartz temper and either black (60%) or red (30%) ferruginous inclusions. There is a dark nucleus in 63% of the cases, which is most commonly thick.

**Surface treatment:** The vessels were slipped a reddish orange (2.5YR5/8), a light orange (5YR4/6 to 6/8), or a yellowish orange (7/5YR6/8 and 7/6). 63% of the sample has a cream underslip.

**Form:** A bowl with flaring walls and an early basal flange that has a continuous curve from the upper wall of the vessel. The rim and the flange together make an everted “C” curve that form one continuous “canvas” for decoration that is 5.6 cm tall. The rim is heavily beveled to the interior, and the vessel wall thins out in the center of the wall. The diameter is 23.4 cm (18-28 cm). The wall thickness is 7 mm (5.2-8.8 mm)

**Type:variety Designation:** All of the sherds belong to the same type and variety:

sherds (figure 6-29)



**Figure 6- 29: Actuncan Group: Actuncan Orange Polychrome:Actuncan**  
**Decoration: Polychrome:** The exterior of the vessels is decorated with complex geometric designs or extremely stylized serpents using red and black lines. One example also has a bit of grey. With the exception of one sherd with a red lip, all of the examples with rims were left orange. Unlike the later Dos Arroyos Orange Polychromes, the decoration on this type continues onto the basal flange, which, with the flared lip, serves to create one large field.

**Interregional comparisons:** While originally defined in the Petén, this type has fallen out of usage outside of Belize (Laporte, pers. comm. 2006). Due to the relative paucity of the Dos Arroyos Group in some collections and the variable preservation, types in this group have been grouped together in various ways. In the Petexbatun (Foias 1996:414-8), for example, no classification was made below the group level. At Seibal (Sabloff 1975), this type was grouped with Dos Arroyos. At Uaxactun (R.E. Smith 1955:128-9), the basal-flanged bowls had an average diameter of 28.7 cm. Two varieties were

identified at Barton Ramie (Gifford 1976:170-3), of which the major difference was the design. Calcite temper dominates the collection. At Altar there were again 2 varieties, one with mica and sand temper and the other with calcite temper. The form is similar to the sample from Salinas de los Nueve Cerros (Dillon 1979:112-4), with either a down-sloping, curved basal flange or a Z-angle.

***Intraregional comparisons:*** This group has been found in small quantities in caves in the Candelaria system and the eastern part of the San Francisco Hills

***Observation:*** However, there has been a debate concerning how to place types in this group into a chronological framework. Surface decoration is a common approach (c.f. Gifford 1976, Calaghan 2005), with the presence of lines of dots defining Actuncan and related types. I have distinguished this group from Dos Arroyos on the basis of form, although the style and iconography present on the Tzakol 1 material is also distinct from Dos Arroyos.

*Dos Arroyos Group* (6% of the Early Classic sample)

Dos Arroyos Orange Polychrome: Dos Arroyos

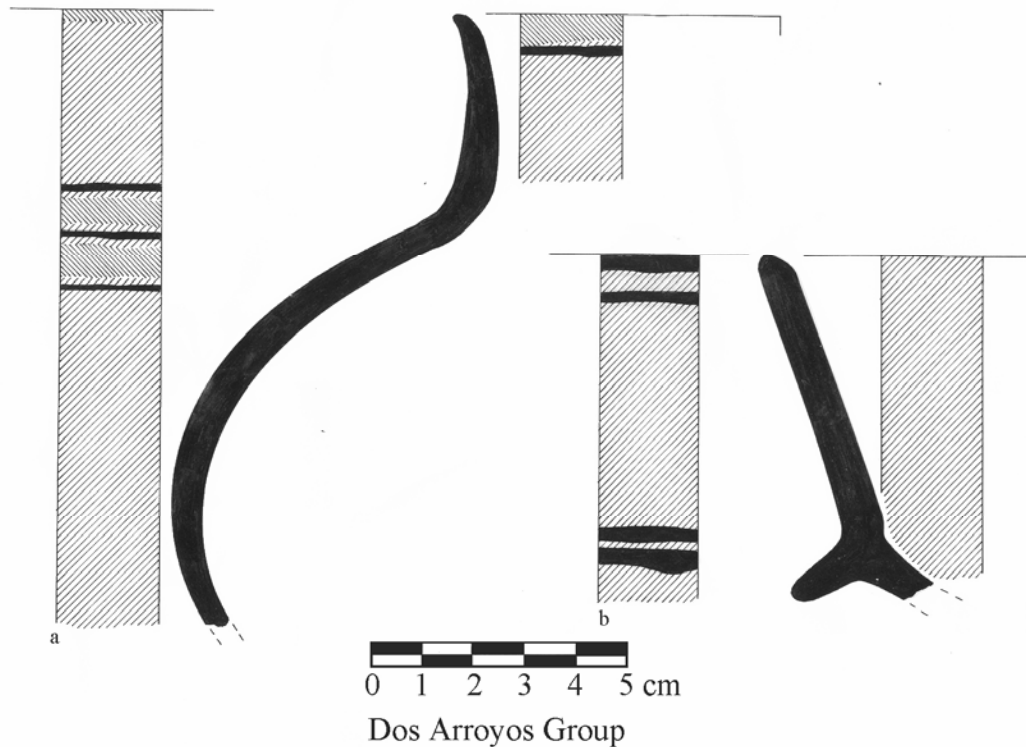
***Group:*** Dos Arroyos

***Ware:*** Petén Glossy

***Complex:*** Tzakol 2/3

***Sample:*** 956 sherds and one partial vessel, of which 791 were subjected to a more detailed analysis. The sample includes 310 special body sherds, 310 body sherds, 214 rims, 124 bases, 21 rim-to-base sherds, and 2 necks.

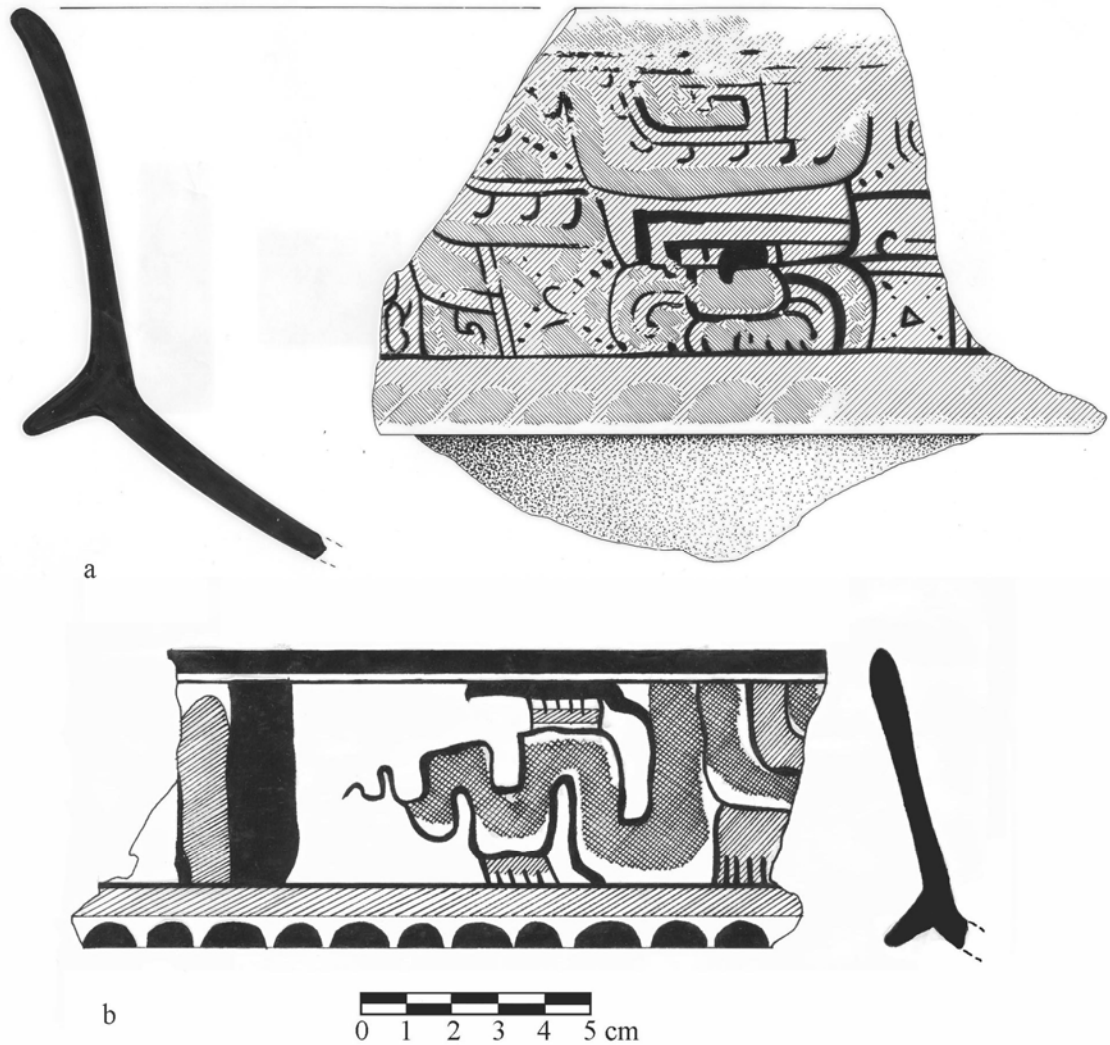
**Principal identifying modes:** 1) A jar or bowl with 2) an orange slip with simple or complex designs atop it in reds, blacks, and occasionally greys; 3) fine red or orange paste with quartz or calcite temper.



**Figure 6- 30: Dos Arroyos Group, a-b) Dos Arroyos Orange Polychrome: Dos Arroyos Paste:** The color is highly variant, ranging from dark red (7.5R4/6) to light tan (10YR4/4 to 6/4), but most commonly orangish red (10R4/4 to 7/6), reddish orange (2.5YR5/6 to 6/6), or light orange (5YR5/6 to 6/8). The temper is most commonly fine quartz (52%), followed by medium quartz (18%). Occasionally the temper is fine (14%) or medium (5%) calcite, a small (6%) or medium (2%) calcite and quartz mix, fine sand (2%), or fine (less than 1%) or medium (less than 1%) volcanic ash. In a few of the examples, the calcite temper is much denser than normal, giving the paste a “salted” appearance.

When inclusions are present (in 87% of the cases), they are normally black (44%) or red (22%) ferruginous lumps or occasionally mica (18%), which is often mixed with

the former. Three examples have organic inclusions, which are present in the form of charcoal in one sherd. There is a dark nucleus present in 30% of the cases, which is equally divided between thin and thick widths.

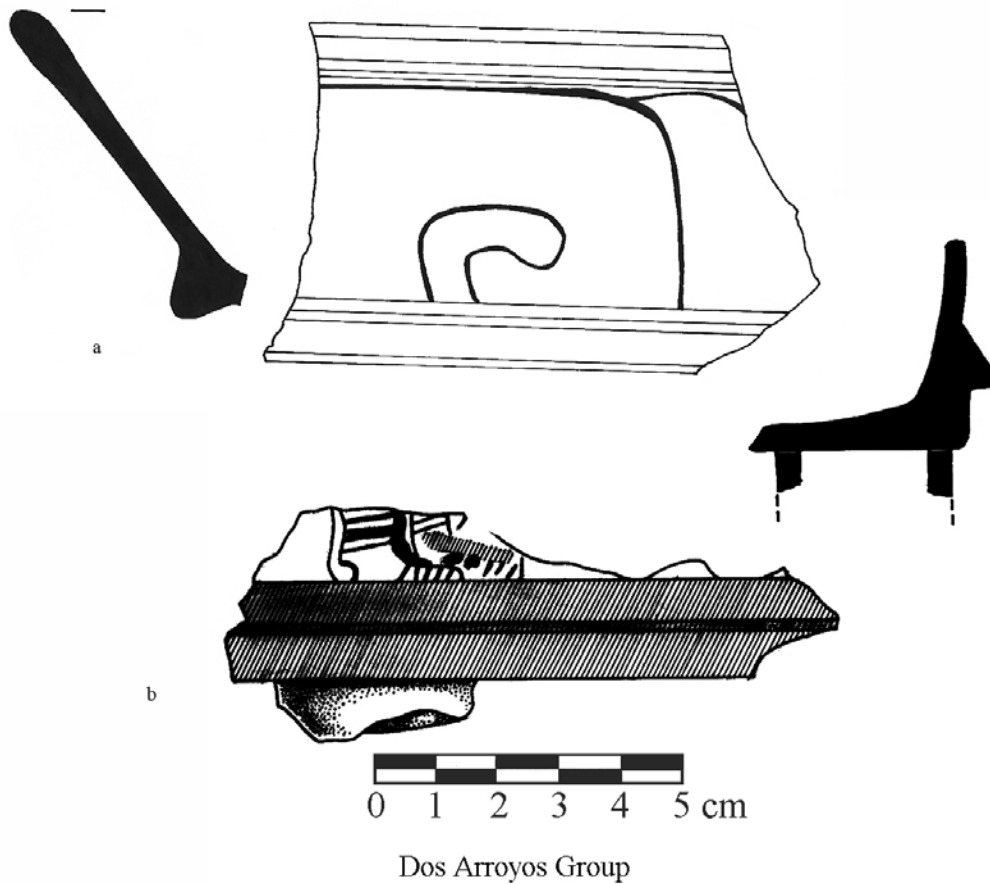


Dos Arroyos Group

**Figure 6- 31: Dos Arroyos Group, a) Dos Arroyos Orange Polychrome: Dos Arroyos, b) Dos Arroyos Orange Polychrome: Candelaria**

A small amount of the sample (19 sherds) has a very soft orangish red (10R5/3 to 6/8) paste and is classified as a separate variety of Dos Arroyos Orange Polychrome (see below).

*Slip:* As with *Águila Red-Orange:Águila*, the primary slip is an orange with consistent color on any particular example but highly variable in the collection, from red (10R3/6 to 8/8) to yellowish orange (7.5YR5/8 to 8/2), but most commonly a light orange (7.5YR6/8 or 2.5YR5/8). 83% of the sample has a cream underslip.

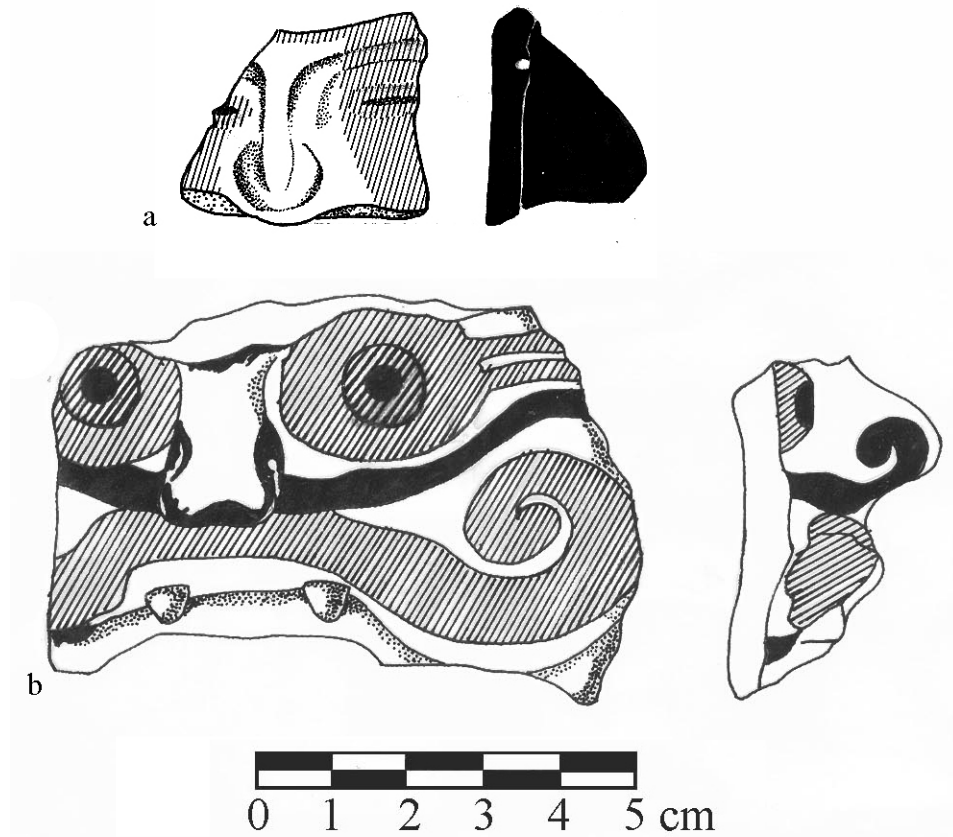


**Figure 6- 32: Dos Arroyos Group, a-b) Dos Arroyos Orange Polychrome: Dos Arroyos**

The slip extends on the exterior to the side of the basal flange of vessels in which it is present, at which point the surface is smoothed to remove any temper that might be present on the surface. Small scars where the temper was dragged are occasionally found. Jars are slipped on the exterior and the interior to the base of the neck. There is fire-clouding present in 6% of the sample.

**Forms:**

1) A bowl with sloping walls and a large basal flange (38%) 4.9 cm below the rim (3.1-7.4 cm). The rim is rounded (22%), squared (6%), pointed (1%), or interior beveled (72%) and the bowls have a ring base. One vessel is nearly complete and has an 8.5 cm height. The diameter is 22.1 cm (12-48 cm) and the wall thickness is 6.8 mm (4-11 mm).



**Dos Arroyos Group**

1)

**Figure 6- 33: Dos Arroyos Group, a) Unnamed Bichrome Appliqué, b) Unnamed Polychrome Appliqué**

2) A bowl with sloping walls (25%) and a rounded (21%), squared (12%), pointed (1%), or interior beveled (66%) lip and ring base. The bowls have a diameter of 27.2 cm (17-37 cm). Many of these likely had a large basal flange. The wall thickness is 6.4 mm



(3.9-9.8 mm). One whole vessel has an interior beveled lip and is 7.4 cm tall with a coke-bottle base and a 29.4 cm diameter (26-35 cm).

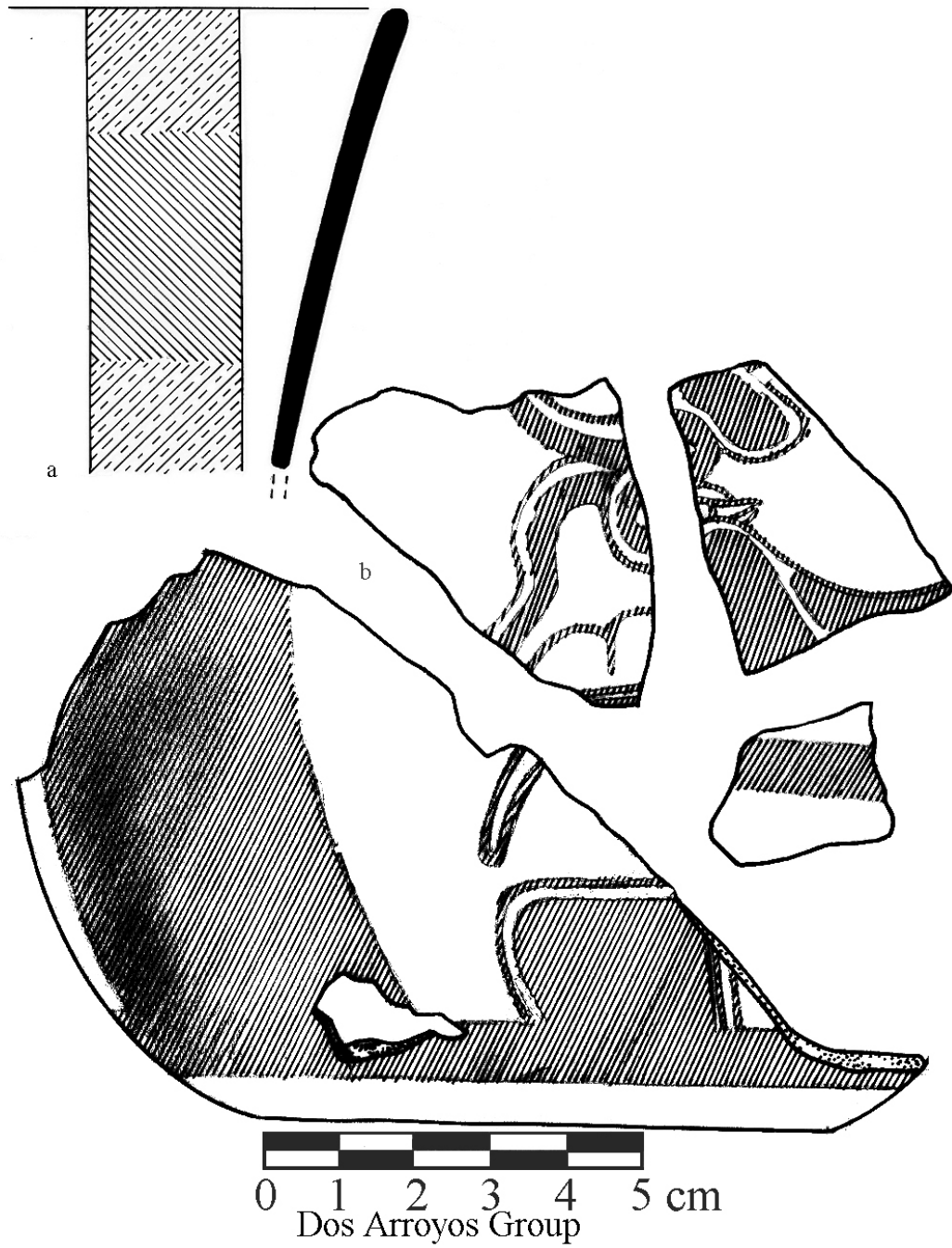


Figure 6- 34: Dos Arroyos Group, a-b) San Blas Red-on-Orange

3) A general bowl form (23%) with a ring base; a rounded (30%), squared (5%), or interior (60%) or exterior (5%) beveled lip; and a 27.3 cm diameter (12-40). The wall thickness is 6.1 mm (3.2-10.4 mm).

4) A squat jar (8%) identical to form 1 of Águila Red-Orange:Águila with simple geometric designs below the neck. The lip is rounded (87%), pointed (7%), or with an interior bevel (7%) and the neck is 4.0 cm (2.1-5.6 cm). The diameter is 12.4 cm (10-15 cm) and the wall thickness is 6.1 mm (2.4-9.8 mm)..

5) A slightly incurved bowl (2%) with a rounded (13%), squared (25%), or interior beveled (63%) lip and a 25.9 cm diameter (20-31 cm). The wall thickness is 6.1 mm (3.2-8.8 mm).

6) A bowl with flaring walls (1%), a rounded (50%) or interior beveled (50%) lip, and a 24.3 cm diameter (22-27 cm). The wall thickness is 6 mm (5-8.9 mm).

7) A general plate form (1%) with a wall thickness of 6 mm (4.9-6.8 mm).

8) A scutiform lid (less than 1%) with a 30 cm diameter and a shallow grooved lip. The wall thickness is 10 mm.

9) A bowl with vertical walls (less than 1%) with a diameter of 23 cm (17-29 cm) and a wall thickness of 5.6 mm (5-6.1 mm).

10) A cylinder (less than 1%) with a diameter of 14 cm and a wall thickness of 6.4 mm (3.5-9.6 mm).

**Type:variety Designation:** Most of the sherds belonged to pre-established types:

San Blas Red-on-Orange:San Blas (R.E. Smith and Gifford 1966:162)—12 sherds (figure 6-34 *a-b*) and a whole vessel

Dos Arroyos Orange Polychrome: Dos Arroyos (R.E. Smith and Gifford 1966:157)—601 sherds (figure 6-30 *a-b*, 6-31 *a*, 6-32 *a-b*) and 1 partial vessel

Dos Arroyos Orange Polychrome: Candelaria (smudged interior; established here)—196 sherds (figure 6-31*b*)

Dos Arroyos Orange Polychrome: ND/orange paste (established here)—19 sherds

Unnamed Bichrome Appliqué—1 sherd (figure 6-33 *a*)

Unnamed Polychrome Appliqué—1 sherd (figure 6-33 *b*)

***Decoration:***

1) *Bichrome*: Simple geometric designs were painted atop the orange slip in red. The decoration is found on rounded and sloping bowls, squat jars, and cylinders, and while exact chronological placement is impossible with the sample, this decoration is normally limited to Tzakol 3.

2a) *Polychrome*: Atop the primary slip, designs were created in reds, blacks, and occasionally greys. They are simple or complex geometric designs (72% of the identifiable sample), or zoomorphic or anthropomorphic figures (15%). A special type of figure is the “Serpent Head X Complex” (see below), which consists of a complex geometric design bordered on the left and right by sinuous serpentine waves. It is present in 13% of the sample but is probably much larger, due to the fragmentary nature of the collection which impedes categorization of the design elements on many of the sherds. The flanges are decorated with concentric lines, triangles, half-dots, or waves. The lip was slipped red, black, or a combination of the two. Some examples have simple geometric designs on the lip, either triangles or half-dots, much like the basal flanges.

2b) *Thin-slipped polychrome*: A few of the sherds have a very soft orange paste and a slip that is thinner and more fragile than in the other varieties of Dos Arroyos. In a few examples, this slip almost appears to be a light wash, although the fact that it is occasionally placed over a cream underslip (33% of the sample) indicates that it is just a shoddy slip. The color of the slip is less variable than for other varieties of Dos Arroyos—either a reddish orange (most commonly 2.5YR6/8) or an orangish red (10R5/8 or 6/6). Most of the examples in the collection are from the empty orange space between designs, so little can be said about the actual decoration. The lips were often painted red and the flange has simple geometric designs (half-dots, triangles, etc.) like the other varieties of the type. One example has fire-clouding on the surface of the vessel. This variety appears on basal-flanged, sloping-walled, and indeterminate bowl forms.

3) *Polychrome with a smudged interior*: This decoration is identical to the standard polychrome, except for the smudged black interior of the vessels. The orange slip was placed over a cream underslip 79% of the time, and it is widely variable, although focusing around yellowish orange (7.5YR6/8) or reddish orange (2.5YR5/8). The decorations have a similar distribution, from geometric designs (66% of the identifiable sample) to pseudoglyphs (2%), and the Serpent Head X motif (15% of the sample). The flange is decorated with concentric lines, half-dots in red and black, waves, and triangles. The lip is often smudged black, occasionally with a red stripe on the external portion of the rim. Fire-clouding is extremely rare (1% of the cases), but occasionally present. Basal-flanged, sloping-walled, and round bowls have this decoration, as do cylinders.

4) *Bichrome Appliqué*: An orange primary slip was placed atop a cream underslip and a humanoid appliquéd face. A secondary red slip was applied around the “coffee bean” eyes. This decoration is only found on a single round bowl.

5) *Polychrome Appliqué*: One round bowl has an orange primary slip atop a cream underslip. An appliquéd Tlaloc face was given more detail with red and black secondary slips.

***Interregional comparisons***: This type appears throughout the Maya world, as far south as Kaminaljuyu (Polychrome A, Kidder *et al.* 1946:178-9) and Copan (R. Viel 1983:509). Part of a probable import was also found at Los Encuentros (Ichon and Hatch 1980:123). The sample in the present collection is in many ways a synthesis of highland and lowland modes, with lowland form and sophistication but highland shades and dimensions. This is most apparent in the Candelaria variety (see below), where the interiors are smudged black, a mode nearly nonexistent in the lowlands.

The most common forms are bowls with basal flanges or Z-angles throughout the Maya World. Ring-bases are the most common, but at Piedras Negras (Holley 1983:454-9), tripod supports characterize one of the varieties. In the central Petén (R.E. Smith 1955:139-43, 156-9; Forsyth 1989:68-71; Laporte 1989:224; Culbert n.d.), the basal-flanged bowls have a much larger diameter, averaging 28.3 and 30.4 cm at Uaxactun in Tzakol 2 and 3, respectively, and with a range of between 30 and 42 cm at El Mirador. Edzna (Forsyth 1983:71-3) has a similar range (29-41 cm). At Uaxactun the average bowl stands 5.6 cm tall.

As you move south or west from the central Petén, the bowl diameter gets smaller. At Piedras Negras (Holley 1983:454-9), the average diameter is 22 cm, and at Tonina (Becquelin and Baudez 1985:233) it is 24 cm.

The paste is most commonly carbonate, although a non-carbonate paste dominates the Tikal collection; however sand is common at Altar de Sacrificios (Adams 1971:37). At most sites, the primary orange paste is much less red than in the present sample. Grey paint is very rare in the Maya World, appearing only occasionally at Tikal and Barton Ramie.

Jars are present at El Mirador, Tikal, and Edzna (the last of which has a diameter of 5-7 cm). They are all similar in form to the present sample.

Related types are found throughout the highlands and transversal. Culbert (n.d.) defined two other Early Classic orange polychromes at Tikal, Cochol and Moc. Cochol is distinguished by a brown or tan interior and Moc by very bright slips, an exaggerated basal flange, and a curved exterior with a pronounced interior bevel (similar to the description for Actuncan Orange Polychrome above). Both were identified as imports—Cochol potentially from the southeastern Petén (although Laporte has not to my knowledge identified it in the Atlas sample) and Moc from Kaminaljuyu (where it matches the Polychrome A defined by Kidder, Jennings, and Shook). At Salinas de los Nueve Cerros (Dillon 1979:114-22), there are several related types (all of which are very similar to Dos Arroyos). Juncutanc is closest to a small percentage of the present sample, with very sloppy, carelessly done decoration on a crude body. At Nebaj (A.L. Smith and Kidder 1951:61-4), the bowls have a basal flange, but the walls are gently curving. The diameter of the vessels is between 17.7 and 25.5 cm and have a height of between 6.5 and

9.5 cm. In the Salama Valley, orange polychromes become prominent in the Middle and Late Classic (Sharer and Sedat 1987b:87).

The “Serpent Head X” motif present on a large portion of the collection from Candelaria was originally defined by Kidder, Jennings, and Shook (1946:223-6) at Kaminaljuyu, Copan, Palenque, Río Hondo, and Chama. R.E. Smith (1955:70) reported similar examples at Uaxactun and Nohmul. This same design is found on Jumal Orange Polychrome vessels at Salinas (Dillon 1979:420, Fig. 26 c, d, and i) and in a private collection from San Pedro Carcha (pers. obs. 2005).

Orange polychrome with a smudged interior is rare in the Maya lowlands, although several Dos Arroyos sherds from caves in the Petexbatun are smudged (pers. obs. 2006). An identified type at Salinas de los Nueve Cerros, Jumal (Dillon 1979:118-20) has a small portion with a black-slipped interior. Similar types in the highlands often have a smudged interior as well (c.f. A.L. Smith and Kidder 1951:61-4). There is a small amount of this variety present in the cave collection from the Petexbatun (pers. obs. 2005). Interior smudging goes far beyond polychromes, however, in the highlands and is a common mode for most of the types described by Arnauld (1986), Becquelin *et al.* (2001), Wauchope (1975), and Ichon (1992) throughout the region to the south of the present sample.

Orange polychrome with an orange paste and a very thin slip is also rare. One variety (Variety B) at Barton Ramie (Gifford 1976:175-6) has a weak slip that is identical in color to the paste, which in this case is brown. There is a small amount of this variety present from the area around Aguateca (pers. observation 2005).

Red-on-orange bichromes appear in small quantities at a number of sites, including Tikal (Culbert n.d., Laporte 1989:224), Uaxactun (R.E. Smith and Gifford 1966:162), La Joyanca (Forné 2005:442-4), El Mirador (Forsyth 1989:68), and Edzna (Forsyth 1983:68-9). At Tikal, the type seems to be restricted to Manik 2. Round bowls are the most wide-spread form (present everywhere except Edzna) but other bowl forms, basal-flanged bowls, and Z-angled bowls are also present in many of the samples.

***Intraregional comparisons:*** This group (with both bichrome and polychrome decoration) appears in the northern part of the region under study, from the Candelaria Caves northward, but the Serpent Head X motif is only found in the Candelaria Caves.

Basal flanged bowls are the most common type in the entire region except for Tres Islas, where the sample has simple bowls with sloping walls (this might have been because of the fragmentary nature of the sample, with any flanges on the vessel having broken off before being deposited in the fill). Straight-walled bowls (many of which probably had the same problem as the sample from Tres Islas) are the second-most common type in the cave sites, followed by jars (although they were absent from the eastern part of the San Francisco Hills). In Candelaria, the basal flanged bowls tend to be slightly smaller than in the rest of the region, with a diameter of 27.8 cm (as opposed to a diameter of around 30 cm at other sites). In addition, the flange is located 4.6 cm below the rim there, as opposed to 5.7-6 cm.

In all of the caves in the region, the lip most commonly has an interior bevel, followed by a rounded lip. In La Caoba Vieja, there are only two rims—one squared and one with an interior bevel, and lips are absent in the Tres Islas sample. The paste is most



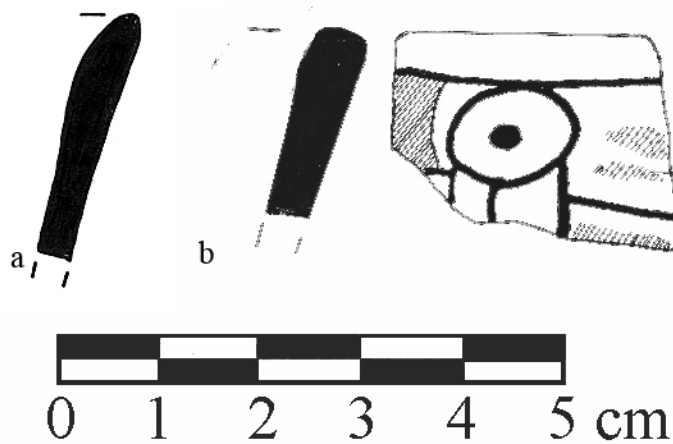
commonly quartz, followed by calcite in the entire region except for Tres Islas, where there is no other type of temper.

The Candelaria variety of Dos Arroyos only appears in the Candelaria Caves and, in small quantities, in caves around Raxruha Viejo (8 sherds), where it makes up 25% of the Dos Arroyos sample. The ND/orange paste variety only appears in one cave in the Candelaria system, as do the appliquéd sherds.

*Caldero Group* (less than 1% of the Early Classic sample)

**Ware:** Petén Glossy

**Complex:** Tzakol 2/3



Caldero Group

**Figure 6- 35: Caldero Group, a-b) Caldero Buff Polychrome:Caldero**

**Sample:** 3 rims, 2 body sherds, and 1 special body, 5 of which were subjected to a more detailed analysis.

**Principal identifying modes:** 1) A jar or bowl with 2) a buff underslip, atop of which designs are painted in oranges, reds, and blacks; 3) red paste with quartz or calcite temper.

**Paste:** The paste is an orangish red (10R5/6 and 6/6), or in one example a light orange (5YR6/6). The temper is fine quartz, medium quartz, or fine calcite, often with mica or either red or black ferruginous inclusions. There is a thin nucleus in one example.

**Slip:** The vessel was slipped buff (10R8/3, 5YR8/3, or 7.5YR7/6), occasionally over a cream underslip (33% of the collection).

**Forms:**

1) A bowl with sloping walls (67%) and an interior bevel and a 31.3 cm diameter (27-36 cm). The wall thickness is 6.7 mm (5.7-7.3 mm).

2) A squat jar (33%) like form 1 of *Águila Red-Orange:Águila*. The wall thickness is 8.2 mm.

3) A general bowl form with a wall thickness of 8.2 mm.

**Type:variety Designation:** All of the sherds were classified as 2 types:

San Bartolo Red-on-Buff:San Bartolo (R.E. Smith and Gifford 1966:163)—3 sherds

Caldero Buff Polychrome:Caldero (R.E. Smith and Gifford 1966:155)—3 sherds (figure 6-35 *a-b*)

**Decoration:**

1) *Bichrome*: Simple geometric designs were painted atop the buff primary slip in red. One example has a more complex, abstract geometric design with broad red swirls.

2) *Polychrome*: Geometric designs were painted in orange, red, and black atop the primary slip. One example has an orange lip. This decoration is present on jars and a bowl with sloping walls.

***Interregional comparisons:*** Buff polychromes are somewhat restricted in area but appear at Tikal (Culbert n.d., Laporte 1989:178), Edzna (Forsyth 1983:75-6), Barton Ramie (Gifford 1976:75-6), the Dolores Valley (Laporte 1995:54), and Copan (R. Viel 1983:509). At all of the sites, the paste, form, and decoration is nearly identical to Dos Arroyos, with the addition of buff slip on part of the vessel (normally the exterior).

One sherd probably of this type was identified at Tonina (Becquelin and Baudez 1985:236-7). It is a buff-slipped basal-flanged bowl with stepped designs in red and black. The paste is the same color as the primary slip.

Red-on-buff bichromes are extremely rare, only having been found at Tikal (Culbert n.d., Laporte (1989:228) and Uaxactun (R.E. Smith and Gifford 1966:163, R.E. Smith 1955:138, 155). It is likely that this type is of local origin, as the paste is well within the range for the Petén Glossy Early Classic pastes.

At Tikal, red-on-buff bichromes only exist as round bowls and pitchers, with occasional scutate lids. The paste is tan or buff and normally has a non-carbonate paste, although there are carbonate examples. At Uaxactun, there is slightly more variety—round bowls are dominant, but a basal-flanged bowl cover and a cylinder tripod form are also present. Designs are simple, and normally bands of red near the lips of the vessels, although one example from Uaxactun is more complex.

A similar type, Gua Red-on-Cream (Adams 1971:29) was identified at Altar de Sacrificios. In addition to differences in the primary slip color, the designs are different as well—hieroglyphs are common, and the interiors have a cream slip with a red lip. At Tonina, another preliminary type, Red-on-Beige (Becquelin and Baudez 1985:236) is normally a basal-flanged bowl with a flat base. The diameter is 19-21 cm, and the slip is

the same color as the surface. Designs appear to be complex geometric. At Barton Ramie, Gifford (1976:156) identified San Ignacio Red-on-Brown, a rare type consisting of bowls and jars with calcite temper and a 3-6 mm wall thickness.

***Intraregional comparisons:*** This group is limited to the Candelaria system.

***Observation:*** I was very conservative in placing sherds into this group, as small sherds with a buff or buff-ish underslip could easily be pieces with an eroded or badly-applied slip.

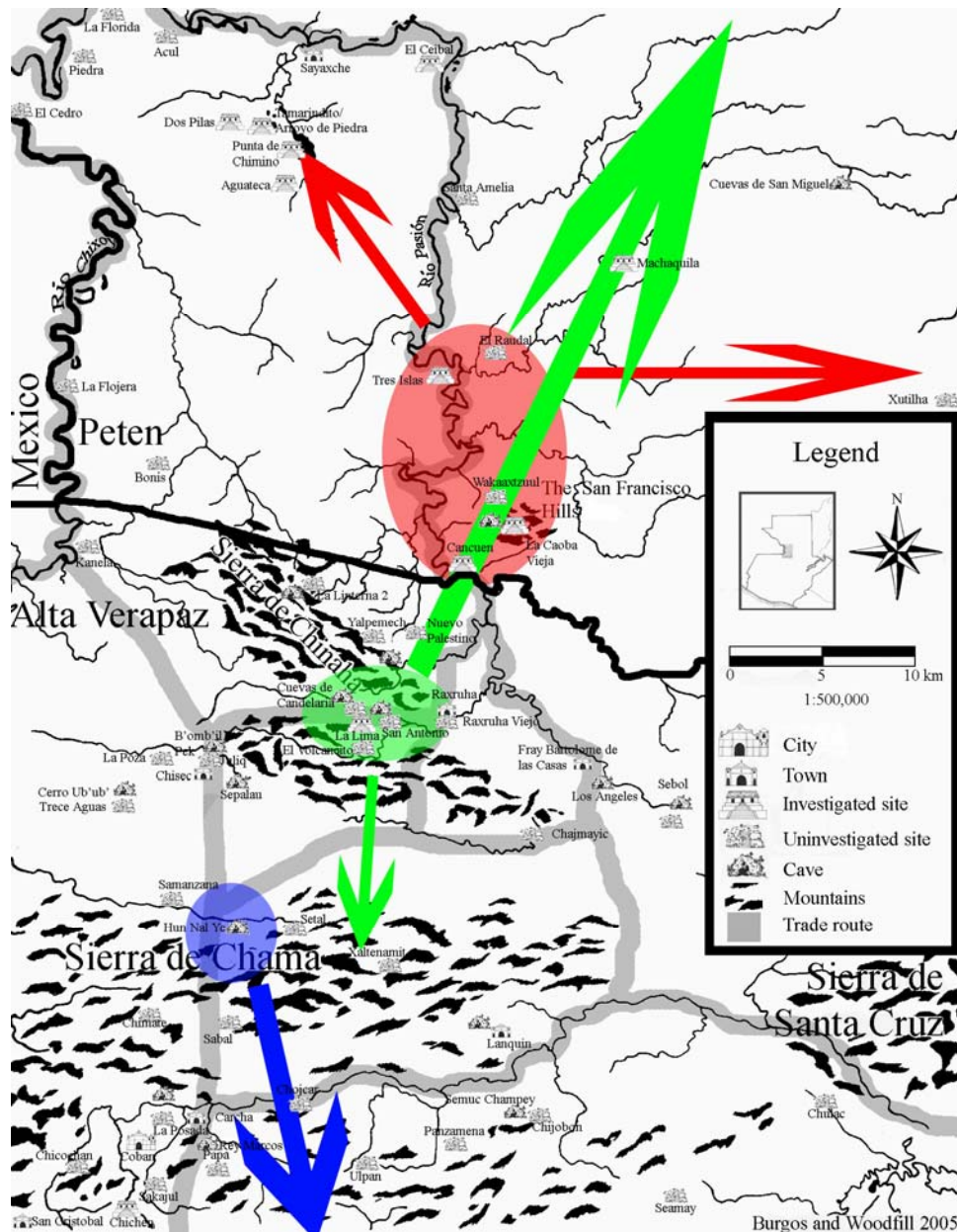
## **Other Artifacts**

While it is not always possible to assign a specific date to the artifacts recovered in the region, for the first time in the Early Classic there is a large number of undisturbed or sealed Early Classic contexts that allow for chronological control for part of the sample (for a complete write-up of the non-ceramic artifacts, see Appendix 1).

After ceramics, the most common artifacts are obsidian prismatic blades, which were likely made in the same communities that produced the ceramics. With the exception of the obsidian prismatic cores found in a stela cache in Tres Islas, however, there is little direct evidence of production until the Late Classic.

Long-distance trade is evident in the Early Classic assemblage. Small quantities of greenstone beads and adzes, carved jade figurines, and mica and pyrite mirrors were recovered from the region's shrines. Marine animals were also present in the assemblage—carved and unmodified marine clams, a saltwater turtle bone, oliveta tinklers, and several pieces of coral were all identified.

## Links to the Central Petén



**Figure 6- 36: Location of Early Classic Ceramics and Regional and Interregional Affiliations**  
 Most of the ceramics appear to date to the very end of the Early Classic—ca. A.D.

460-550, as evinced by chronological markers such as Tinaja Red:Aduana. The size of the sample, the absence of local settlements, and the degree of standardization in the material all point to the development of a local industry based on producing pots for consumption. The pots certainly appear to be produced exclusively for ritual use—in

spite of the level of preservation, there is no evidence of use apart from occasional burning, and many of the vessels are much smaller than in other areas. Since there is no evidence of a major population in the region during this time period, one has to wonder for whom the pots were made.

While it is impossible to say much about the local population, the vessels were made to reflect tastes from the central Petén. Several ceramic artifacts, such as a Balanza Black:Discordia base and several slab-footed cylinder tripods, are related to the region as well. Finally, an appliquéd polychrome bowl with a Tlaloc mask is also likely related to the Tikal sphere, as much of the central Mexican iconography in the Maya world seems to be filtered through Tikal and its allies. In addition to the vessels, three stelae and a carved stone box were recovered in the region, all of which point to direct or indirect links with the central Petén, at least by the end of the Early Classic (figure 6-36). All three of the stelae depict probable rulers alongside warriors in Teotihuacano gear (a motif common to the central Petén), and the stone box shows a lowland presence in the route up to the highlands (Woodfill, Fahsen, and Monterroso 2006). Finally, a pecked cross in the Candelaria system also increases the international ties (*c.f.* Aveni *et al.* 1978, Aveni 1989).

The linchpin for the argument comes from outside of the region—the recently recovered hieroglyphic staircase from Dos Pilas has forced the history of the Río Pasión to be rewritten (Fahsen 2002, Demarest and Fahsen 2003), as it makes clear that Tikal founded Dos Pilas not to take control of the Pasión (as previously thought) but to *maintain* it. But why would this region, which does not appear to have much of a local

population, be important to Tikal? And why would there be so many links to the central Petén in the ritual assemblage and monuments found here?

During the Late Classic, residents of Cancuen took advantage of their location in the center of a major trade route between the Maya highlands and lowlands to establish the city as a major production zone for highland materials. It would appear, according to the artifacts recovered, that the route predates Cancuen and that it became important during the Early Classic, not as a production center but as a thoroughfare. The shrines were likely used by merchants and other travelers traversing the region to bring materials between the highlands and lowlands and were especially important because they straddle both sides of the highland-lowland divide.

## **Conclusions**

At the same time that the material is strongly indicative of ties to the central Petén, there is an equally pronounced local character. This is strongest in the Candelaria Caves, where the local modes almost serve as a “trade mark”—delicate, short walls and small diameters on the Dos Arroyos bowls are unique, and the smudged interiors and serpent imagery show ties to both the highlands and the central Petén while forming a distinct local tradition. Even when the material is not as flamboyantly unique it often still shows distinct, regional modes, not the least of which is the distinct red paste.

In spite of the dominance of a few groups in this collection (Quintal, Águila, and Dos Arroyos together compose 93.2% of the Pel assemblage), there is a wide range of groups and types here, and likely connections with the central and southeastern Petén, the

Lower Pasión, and the northern highlands. The artifactual, iconographic, and (potentially) epigraphic evidence ties the cave use in the region to the central Petén.

Whether this model withstands future investigations in the region, it is obvious that, for the first time, substantial wealth is traveling through the region, part of which was left behind in caves and other shrines. The majority of artifacts appears to date to the end of the Early Classic—Dos Arroyos (Tzakol 2/3) and later Águila forms dominate the sample, and most of the material is mixed with Tinaja Red:Aduana, which is a variety that appears around A.D. 460. Placing all of these artifacts in such a small timeframe makes the shrine use that much more incredible, as it means that over half of the shrine artifactual assemblage dates to the period between ca. A.D. 460 and 550. This escalation of use of both the shrines and the route set up the dramatic regionalism and population explosion of the Late Classic.



## CHAPTER VII:

# THE LATE CLASSIC TO EARLY POSTCLASSIC: REGIONALISM AND DECLINE

### **I. Introduction**

Around AD 550, several major changes occurred in the Pasión-Verapaz region. This region, which until this point had been mostly a thoroughfare, was subject to an apparent population explosion, with settlers moving into the region from several adjacent areas. Several distinct ceramic traditions co-existed in this veritable Babel—northern highland, southwestern Petén, central Petén, and transversal. The material evidence from the southern half of the region (the Candelaria Caves, La Lima, and Hun Nal Ye) is strongly derivative from the northern highlands, and the population likely originated from there. In the northern half of the region (the San Francisco Hills and Tres Islas), the ceramics also demonstrate a strong highland influence, although there are still many examples of typical lowland types.

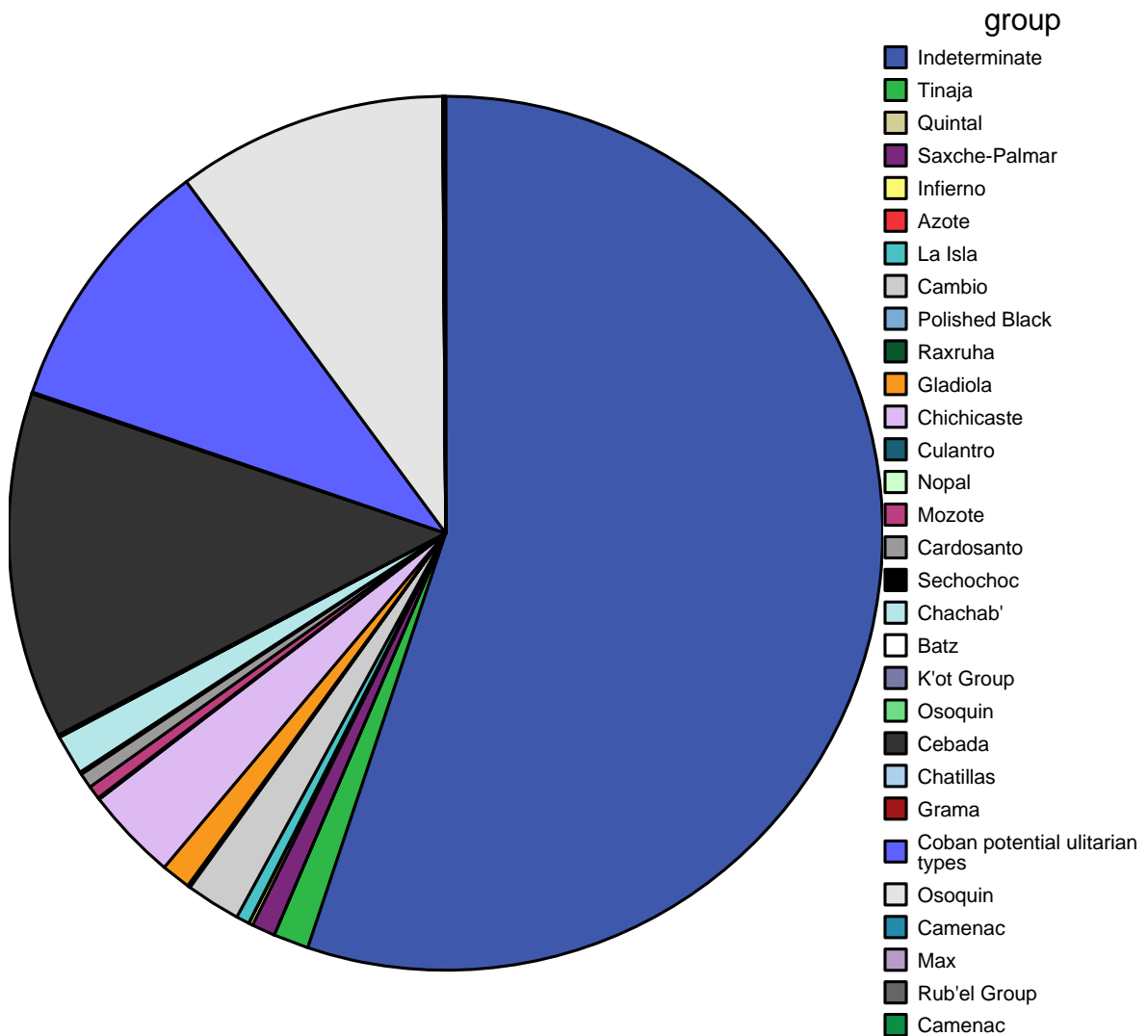
Much of the political and cultural landscape of the region during the Late Classic is defined by Cancuen. It appears that the city was founded in the early Late Classic as a small town of northern highlanders. Soon thereafter, a cadet of lowlanders founded a dynasty there under the auspices of Calakmul (Demarest and Fahsen 2002), and a distinct, regional ceramic sphere developed out of many of the types and modes from the northern highlands, the transversal, and the lowlands (Forné *et al.* 2007).

After the founding of Cancuen, two distinct highland-lowland “borders” appear, depending on the context that one is examining. While lowland and transversal ceramics are found in shrines in the northern  $\frac{3}{4}$  of the region (Candelaria, the San Francisco Hills, and Tres Islas), the settlement nearest the Candelaria system (La Lima) is completely devoid of lowland remains, while La Caoba Vieja, located in the San Francisco Hills, has the same mix of types that are found in Cancuen. Hun Nal Ye, however, continues to be wholly northern highland.

By the close of the Late Classic, it appears that shrine use ceases, and settlements are abandoned in the northern half of the region. A very limited amount of material is still found in Hun Nal Ye, the Candelaria Caves, and La Lima, although by this time all affiliations had shifted definitively south into the highlands. While no lowland ceramics existed in the regional sample, there were several local imitations of Fine Orange Ware (see the description of the K’ot Group below), indicating some contact with lands to the north in spite of the collapse along the river.

## **II. Jolom (Late Classic)**

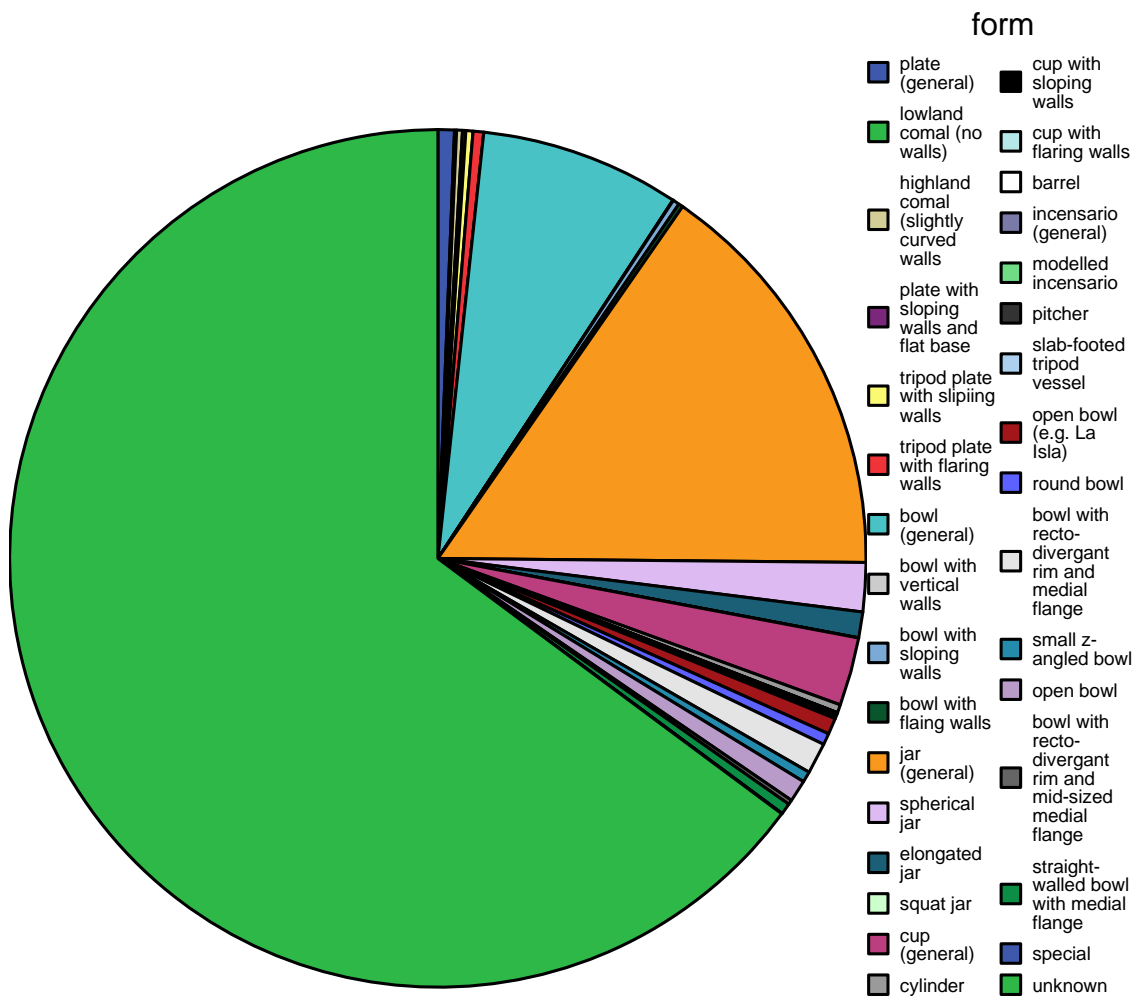
While a large portion of the total ceramic assemblage dates to the Late Classic (35%), much of the sample is heavily eroded, so a larger portion of the sherds are indeterminate. In addition, only part of the excavated material from the Late Classic has been analyzed, although it is a representative sample from each context. That being said, there is a much higher level of diversity of paste, form, and decoration than in previous time periods (figure 7-1).



**Figure 7- 1: Jolom Groups by Sherd Count**

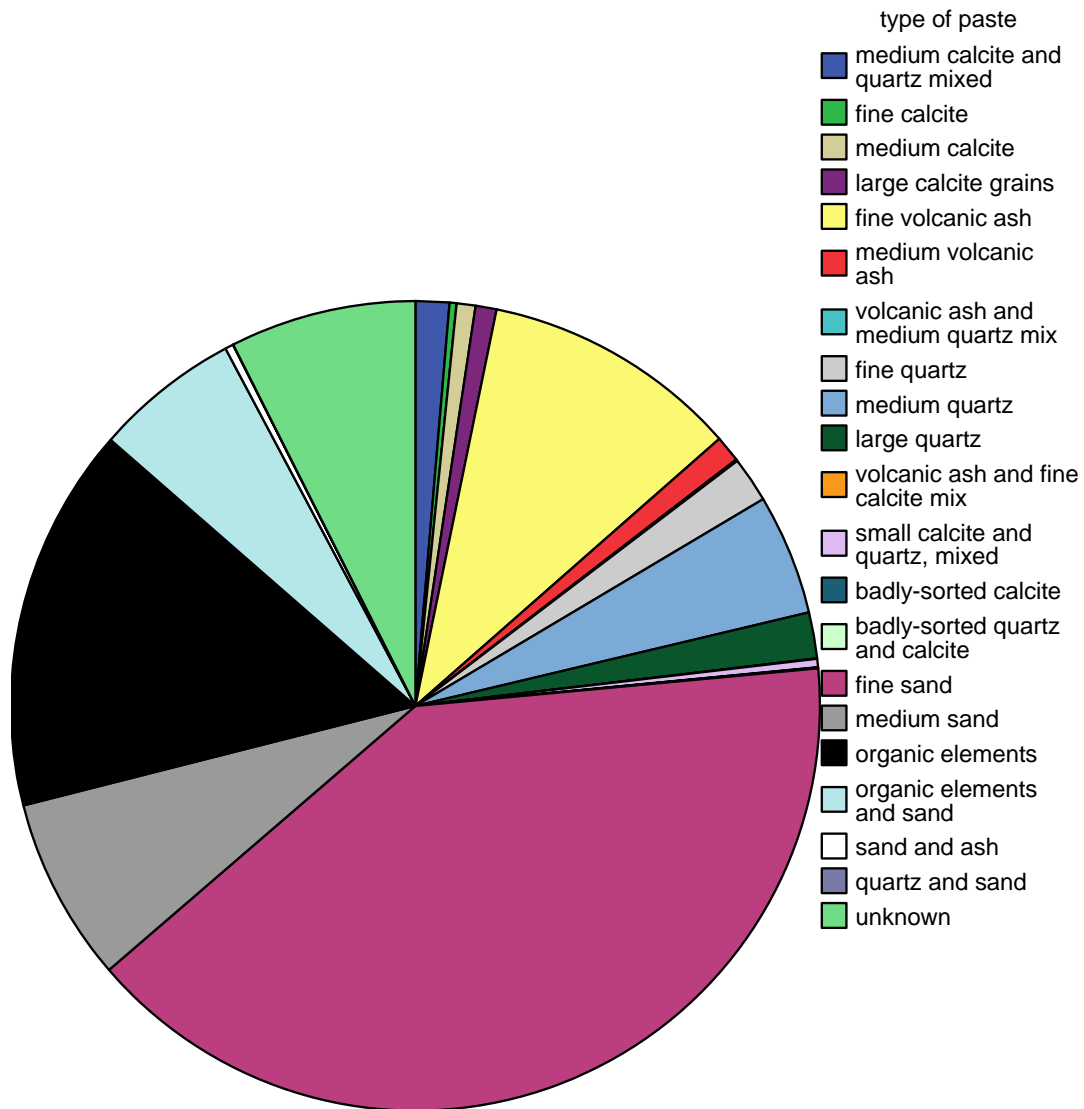
The sample is fairly evenly split between shrines and settlements—Hun Nal Ye, the Candelaria system, the San Francisco Hills, and Tres Islas all have Late Classic sherds, and the majority of the sample from La Caoba Vieja and the entirety of the sample from La Lima date to the Late or Terminal Classic. While the entire cave and shrine sample was analyzed, only a fraction of the settlement sample has been analyzed to date but will be the subject of future investigations.

A full 64.3% of the analyzed Jolom sample is of indeterminate form (figure 7-2), but 17.7% of the sherds belong to jars and 14% belongs to bowls, most typically with recto-divergent walls and a medial flange. 1.7% of the sample has a plate form; most commonly tripods with a straight or flared wall. Cups, cylinders, pitchers, and incensarios are all present in very small quantities. This contrast starkly with earlier time periods, since the sample has a preponderance of highland forms.



**Figure 7- 2: Jolom Forms by Sherd Count**

The paste (figure 7-3) is most commonly fine sand (32.2%) or fine volcanic ash (13.8%), followed by medium quartz (8.7%) or sand (8.7%), fine quartz (7.3%), organic elements (6.8%), large quartz (4.4%), or a mixture of calcite and quartz (4.7%) or organic elements or sand (4.2%). Unlike previous time periods, calcite, a typical lowland temper, is almost non-existent, composing a total of 6.2% of the sample.



**Figure 7- 3: Jolom Paste Types by Sherd Count**

Inclusions are present in 56.7% of the sample and are most commonly black (25.6%) or red (10.6%) ferruginous lumps. Pebbles (5.9%), mica (3.8%), organic

elements (3.7%), charcoal (3%), quartz (2.3%), pumice (1.2%), and shell (.2%) are all present in small quantities as well.

Nearly 2/3 of the sample has an indeterminate slip color (66.6%). Brown (a common color in the northern highlands) is the most common identifiable slip (4.4%), followed by orange (3.5%) and red (2%), with rare instances of cream (0.7%), black (0.2%), black, grey, and buff (each under 0.1%). Nearly a quarter (24.2%) of the sample is unslipped.

A full 90.5% of the sherds appear to be undecorated, but vessels are commonly smudged in the interior (6.4%). Incisions (0.9%) and polychrome (0.8%) are the next most common types of decoration, and the final 0.9% is composed of incised, impressed, fluted, grooved, stamped, bichrome, modeled, gouged-incised, appliquéd, gouged, punctated and incised, modeled and incised, and modeled and impressed sherds.

## **Unslipped**

### ***Uaxactun Unslipped***

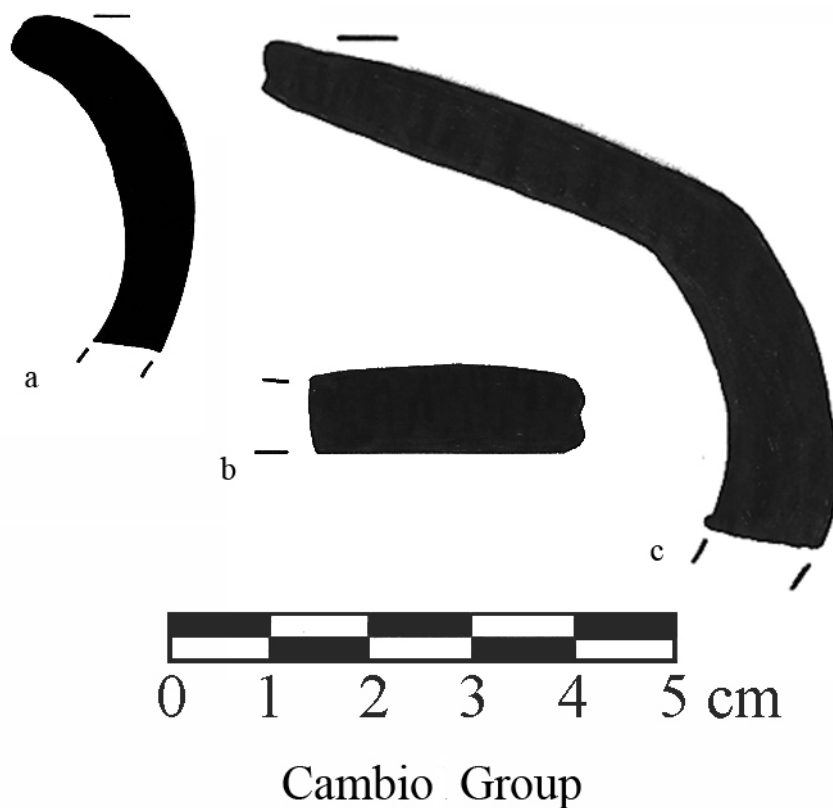
*Cambio Group* (4% of the Late Classic sample)

**Ware:** Uaxactun Unslipped

**Complex:** Tepou

**Sample:** 223 sherds, 1 complete vessel, 6 modified sherds, of which 103 were subjected to a more detailed analysis. The sample includes 165 body sherds, 36 rims, 14 necks, 9 special bodies, 5 rim-to-base sherds, and 1 appendix.

**Principal identifying modes:** 1) A jar, incensario, or comal with 2) a rough tan surface and 3) a coarse red or orange paste with quartz or calcite temper.



**Figure 7- 4: Cambio Group, a-c) Cambio Unslipped:Tzuul**

**Paste:** The paste is widely variable in color, from orangish red (10R5/6 to 7/6) to light orange (7.5YR6/3 and 7/6) with no real clustering in any particular shade. The temper is most commonly large (41%) or medium (21%) quartz or a mixture of medium calcite and quartz (17%), although it is occasionally fine (2%), medium (4%) or large (5%) calcite, fine (9%) quartz, or badly sorted calcite (4%). There are normally black (56%) or red (13%) ferruginous inclusions, occasionally with some mica mixed in. There is a dark nucleus in 59% of the cases, which is almost always thick. In two cases the paste has been completely reduced to black.

**Surface:** The surface is rough with temper and inclusions sticking out of the surface. The paste tends to cook to tan on the exterior and interior of the vessel. Most of the sample (59%) has fire-clouding.

**Forms:** 3% of the sample is of an indeterminate form.

1) A spherical jar (91%) with a fluid “C” curve from the body through the neck to the rim. The lip is rounded (18%), squared (13%), pointed (3%), interior beveled (3%), or shallow grooved (62%), occasionally with a slight groove just above the lip. The diameter is 25 cm (11-41 cm), the neck is 5.6 cm (3.9-8.5 cm) tall, and the wall thickness is 8.3 mm (4.9-12.2 mm).

2) A general incensario form (4%) with a 25 cm diameter (19-30 cm) and a wall thickness of 7.9 mm (4.8-11.4 mm).

3) A lowland comal form (2%)—a round disk with a 38.5 cm diameter (24-60 cm). The lip is rounded (25%) or grooved (75%) and the wall thickness is 9.7 mm (7.2-11.5 mm).

**Type:variety Designation:** All of the material belongs to pre-established types, but one variety is established here:

Cambio Unslipped:Tzuul (the type was defined by R.E. Smith and Gifford 1966:155; the variety is established here)—202 sherds (7-4 *a-c*), 1 complete vessel, and 6 modified sherds

Pedregal Modeled:Appliqué Head (the type was established by R.E. Smith and Gifford 1966:160, the variety was established by Sabloff 1975:114)—2 sherds.

Encanto Striated:Encanto (R.E. Smith and Gifford 1966:157)—19 sherds

**Decoration:**

1) *Plain:* Undecorated sherds correspond to all of the form listed above.



2) *Striated*: This type of decoration is limited to jars and is only present on the vessel's exterior below the neck. Striations are wide, regular, and deep. 57% of the sample has dark fire-clouding on the exterior of the vessel.

3) *Appliqué*: Both sherds with this decoration are incensarios. One is an anthropomorphic nose, and the other has a complex geometric pattern and Maya blue paint.

***Interregional comparisons:*** This is a wide-spread group throughout the lowlands, appearing at Tikal (Culbert n.d.), Uaxactun (R.E. Smith and Gifford 1966:155), Tikal (Culbert n.d.), El Mirador (Forsyth 1989:114), Calakmul (Domínguez Carrasco 1994:245), Yaxchilan (López Varela 1987:187), La Joyanca (Forné 2005:486-7), the Dolores Valley (Laporte 1995:65-8), Altar de Sacrificios (Adams 1971:112-3), Seibal (Sabloff 1975:114), and the Petexbatun (Foias 1996:435-43). At all of these sites, the most common form is medium- or tall-necked jars with exterior bolstered or folded-over lips and an angle at the shoulder. There is often some attempt at smoothing, although rough surfaces are present in many of the areas.

The standard variety differs from the present sample enough to warrant the creation of a separate variety. The form here is similar to a variant of Osoquin Unslipped:Osoquin (see below), which is a type defined by Dillon (1979:51) in Salinas de los Nueve Cerros. The paste is identical to sites throughout the lowlands, however, although the surface treatment is somewhat different (less smoothed).

Cambio Unslipped comales are more common in the Petexbatun than in this region (20% of the 43 cases reported), but the sample size was smaller than the present

one, and only rims were analyzed. Different types of plates and bowls are less common in the Central Petén.

Cambio is absent at Piedras Negras, but several related Late Classic types were identified (Holley 1983:362-71). The differences are minimal between these and the Cambio types. In addition to Osoquin, another related type, Xajal, was found at Salinas de los Nueve Cerros (Dillon 1979:49-53). It consists of jars with a reddish-orange wash and similar modes to the standard variety of Cambio. Lapon, Nebail, and Tziquib continue from the Early Classic and are described in the discussion for Quintal in the previous chapter. At Tonina there are 2 Late Classic unslipped types, Pestac Simple and Sacbalam Simple (the latter with two varieties, Ordinary and Polished). Pestac is composed predominately of jars, although there are a few plates and bowls, while Sacbalam has mostly large plates with a convex base. In Alta Verapaz, there are several unslipped types (Cebada Porous, Grama Incensario, and Chatillas Smoothed), all of which are present in the Jolom sample and are described below.

Modeled incensarios are present at Uaxactun (R.E. Smith and Gifford 1966:114), Tikal (Adams 1971:57), La Joyanca (Forné 2005:496-7), Piedras Negras (Ibid., Holley 1983:561-3), Seibal (Sabloff 1975:114-6), Altar de Sacrificios (Adams 1971:58-9), and the Petexbatun region (Foias 1996:461-5). The form and surface treatment is most closely related to other sites along the Río Pasión, and, at most of the sites, they are covered with a white wash. Incensarios were not identified in the Petexbatun sample (Foias 1996:435-42).

Two modeled types are present in the collection from Salinas de los Nueve Cerros, Pisote Modeled (Dillon 1979:205-6) and Tzerru Unslipped (ibid.:52-3). The

former almost resembles a shoe-pot with a large cuatimundi face appliquéd and molded onto the body below the neck. The latter is a round or vertical-sided bowl with very crude modeling and a gritty surface. At Tonina, a related type, Cololte Incensario (Becquelin and Baudez 1985:244-6), often has an anthropomorphic or zoomorphic paste decorated with red and Maya blue paint.

Encanto Striated is common throughout the central and southern lowlands, appearing at Uaxactun (R.E. Smith and Gifford 1966:157), Tikal (Culbert n.d.), El Mirador (Forsyth 1989:117), Seibal (1975:155), Altar de Sacrificios (Adams 1971:19), the Dolores Valley (Laporte *et al.* 1993:109, Laporte 1995), La Joyanca (Forné 2005:487-8), Yaxchilan (López Varela 1989:113), and the Petexbatun (Foias 1996:453-7). It is normally identical to Cambio Unslipped jars with the addition of deep striations on the body.

***Intraregional comparisons:*** This group is found in most of the northern  $\frac{3}{4}$  of the region, although it is rare in the Candelaria Caves (only 2 sherds). The most common form is a jar throughout the region in which the type is found. In Candelaria and the eastern part of the San Francisco Hills other forms are found—incensarios followed by comales in the former and comales in the latter. The lip is most commonly grooved in these two regions and rounded in the central part of the San Francisco Hills and Tres Islas. The paste is most commonly quartz in every part of the region except for La Caoba Vieja, where it is a calcite and quartz mix.

The appliquéd sherds are from Tres Islas, and the striated sherds are found in caves in the Candelaria system and the San Francisco Hills.

**Observation:** There are very few examples of Cambio variety jars, with a folded-over lip. All 3 examples are from the Candelaria Caves, and they are probably a transitional Quintal-to-Cambio type, as they have a smoothed surface like Quintal but the diagnostic lip of Cambio. I believe that these vessels were placed in the caves before Cancuen took control of the region, which would explain the lack of local modes, but the lack of stratigraphic control prohibits a definitive statement.

*Delgado Group* (8% of the Late Classic sample)

**Ware:** Uaxactun Unslipped

**Complex:** Jolom

**Sample:** 425 sherds. 35 were subjected to a more detailed analysis. The sample consists of 407 body sherds, 15 rims, and 3 necks.

**Principal identifying modes:** 1) A jar with a 2) “crinkled” exterior and 3) a red or orange paste with a quartz temper.

**Paste:** The paste spans from red (10R4/6) to light orange (7.5YR5/2), although it is most commonly an orangish red (10R5/6 to 6/4). The temper is most commonly medium quartz (57%), but occasionally fine (9%) or large (20%) quartz, fine calcite (3%) or ash (3%), or fine (3%) to medium (3%) calcite and quartz mixed together. There are inclusions in 32% of the sample—black (25%) or red (7%) ferruginous lumps. There is a dark nucleus present in 45% of the sample, which is most commonly thick.

**Surface:** The surface is grey and has a “crinkled” appearance to it, with small jagged folds naturally appearing on both the internal and external sides. There is fire-clouding present in 57% of the sample.

**Form:** A general jar form with a wall thickness of 5.2 mm (3.8-12.5 mm).

**Type:variety Designation:** These sherds were classified as 1 type which is established here:

Delgado Unslipped:Delgado

**Decoration:** The sherds are undecorated.

**Interregional comparisons:** For a general description of Lat Classic unslipped wares, see discussion for Cambio Unslipped:Tzuul above.

**Intraregional comparisons:** This group was identified in several caves in the Candelaria system and the San Francisco Hills.

**Observation:** This type appears to be unique to the present region. For a general description of Late Classic unslipped types, see the discussion for Cambio above.

### ***Lanquin Unslipped Ware***

*Cebada Group* (28% of the Late Classic sample)

**Ware:** Lanquin Unslipped

**Complex:** Coban 2 (Late Classic)

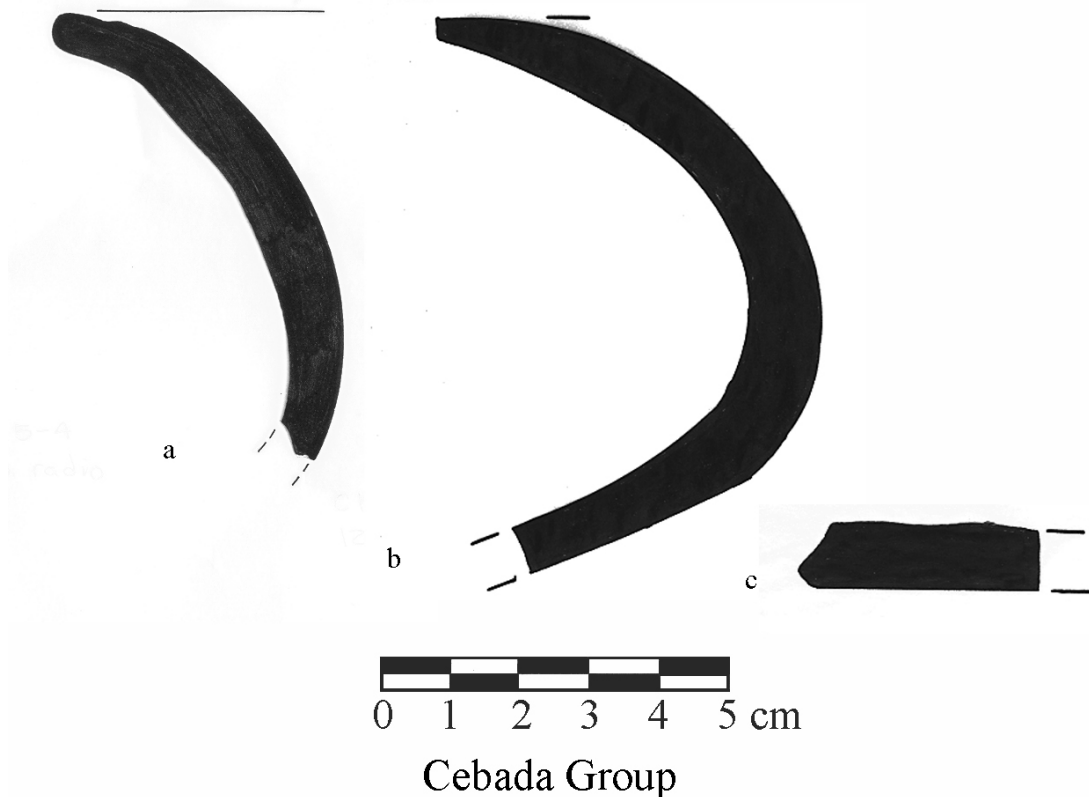
**Frequency:** 1458 sherds, of which 82 were subjected to a more detailed analysis.

**Principal identifying modes:** 1) A jar, plate or bowl with 2) a porous surface and 3) a very spongy, porous pink or orange paste.

**Paste:** The paste is light and very sponge-like because of the organic materials that were used as the temper, and under the microscope a thin coating of fine ash is visible in the pores. The color is variable, from pink (10R5/8 to 8/4) to light orange (7.5YR5/4 to 7/6). There is often a bit of visible charcoal remaining and occasionally a light sprinkling of

black (12%) or red (15%) ferruginous inclusions, or very rarely pebbles (9%) or mica (2%). There is a dark nucleus present in 49% of the sample.

**Surface:** The surface is riddled with pockmarks and pores from the organic temper after it burnt off. It is a distinct tan color, and 40% of the sample has dark fire-clouding.



**Figure 7- 5: Cebada Group, a-c) Cebada Porous:Taqa**

**Forms:**

1) A jar (95%) with a fluid curve between the lip and the body and a very outflaring lip. The lip is rounded (20%), squared (25%), pointed (5%), interior (15%) or exterior (15%) beveled, or with a shallow groove (20%). The neck is 6.9 cm (5.5-8.4 cm) tall, and the diameter is 28.2 cm (18-35 cm). The wall thickness is 9 mm (4.5-17.1 mm).

2) A general bowl form (2%) with a wall thickness of 8.6 mm (7.1-10 mm).

3) A highland comal with highly inclined walls (2%) and a rounded (63%) or squared (38%) lip. The diameter is 35.2 cm (30-45 cm), and the wall thickness is 8.9 mm (6.7-11.9 mm).

4) A flared bowl or plate (less than 1%) with an interior (50%) or exterior (%) bevel on the lip and a 23 cm diameter (20-26). The wall thickness is 10.4 mm (8.5-12.2 mm).

5) A lowland-style comal without walls (less than 1%). The lip has a shallow groove, and the diameter is 41 cm. The wall thickness is 8.9 mm.

6) A bowl with sloped walls (less than 1%) with an interior bevel on the lip. The diameter is 34.5 cm (32-37 cm), and the wall thickness is 8.5 mm (8-9 mm).

***Type:variety Designation:*** All of these sherds belong to a newly-established variety of an established type:

Cebada Porous:Taqa (established by Arnauld [1986:329] in Alta Verapaz, but the local variety has a different form, so it is given a separate variety here, figure 7-5 *a-c*)

***Decoration:*** All of the sherds are unslipped.

***Interregional comparisons:*** Organic temper is extremely rare in the Maya World, and seems to be restricted to Alta Verapaz. This particular type was only found in the northern part of Arnauld's regional survey. Organic temper is mixed with other tempers in Osoquin Unslipped:Osoquin and is present in some of the examples from the Rub'el group (see below). In earlier time periods, organics are occasionally present in the current sample as a secondary temper or inclusions in occasional sherds.

Like Cambio Unslipped:Cambio, the jar form was changed to imitate Osoquin Unslipped:Osoquin. In southern and central Alta Verapaz, the jars have a much more

restricted opening (Arnauld 1986:329 and Figure 139) and large handles that attach to the body. Comales are also present.

For a general description of Late Classic unslipped wares in the Maya World, see the discussion for Cambio Unslipped:Tzuul above.

***Intraregional comparisons:*** This group is mostly found in La Lima and two associated caves in the Candelaria system, although few examples are found in caves in the eastern part of the San Francisco Hills. The form is primarily a jar in all of the sites where it is found, although comales are present in the San Francisco Hills and La Lima. The lip is most commonly grooved in the Hills, followed by rounded or squared varieties, while in La Lima, the lip is most commonly rounded or squared, followed by an interior and exterior bevel. The paste is ubiquitous throughout.

This group is also present in Cancuen.

*Chatillas Group* (less than 1% of the Late Classic sample)

***Ware:*** Lanquin Unslipped

***Complex:*** Coban 2 (Late Classic)

***Sample:*** 1 rim sherd and 1 appendix, both of which were subjected to a more detailed analysis.

***Principal identifying modes:*** 1) A comal or bowl with 2) a rough exterior and a heavily smoothed interior; 3) orange paste with quartz temper.

***Paste:*** The paste is a light reddish orange (2.5YR6/6) with fine or large quartz temper. One example has red ferruginous and mica inclusions; both have a thick dark nucleus.



**Surface:** The exterior is rough and un-modified, and the interior has been heavily smoothed, although brush scars are still visible.

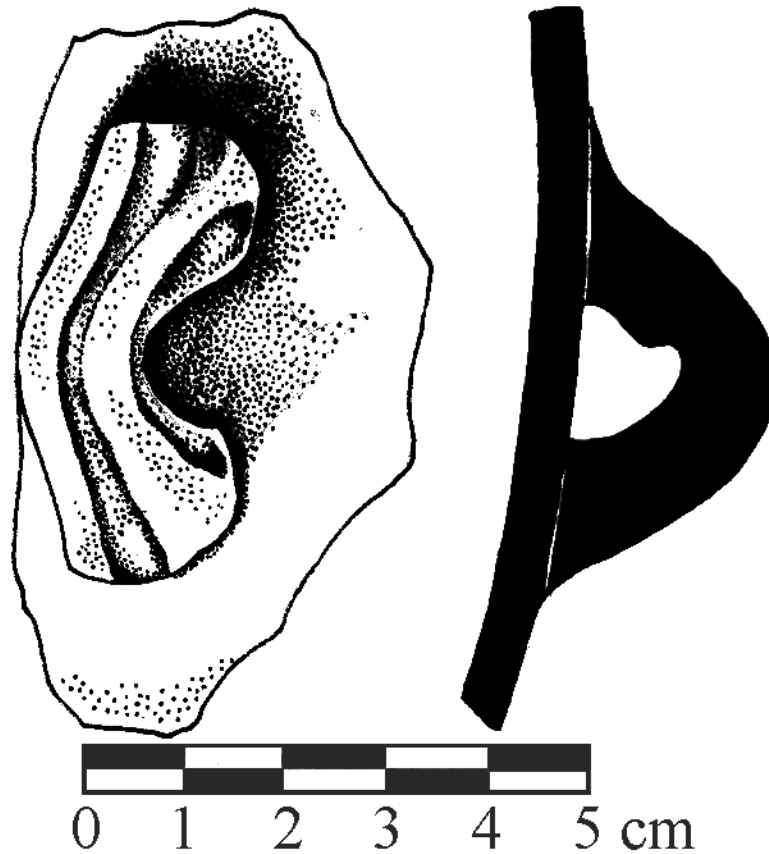


Figure 7- 6: Chatillas Group, Chatillas Smoothed:Chatillas

**Forms:**

1) A lowland-style comal without walls. The lip has a shallow groove at its center, and the diameter is 29 cm. The wall thickness is 8.2 mm.

2) A bowl with sloping walls and a wall thickness of 6.4 mm.

**Type:variety Designation:** These sherds belong to the same type:

Chatillas Smoothed:Chatillas (Arnauld 1986:331, figure 7-6)

**Decoration:** These sherds are heavily smoothed in the interior.

***Interregional comparisons:*** This type is only present in Alta Verapaz and here.

Comales, bowls, and jars are all present in Arnauld's sample. For a general description of Late Classic unslipped types, see the discussion of Cambio Unslipped:Tzuul above.

***Intraregional comparisons:*** Both of these sherds come from the San Francisco Hills.

*Grana Group* (less than 1% of the Late Classic sample)

***Ware:*** Lanquin Unslipped

***Complex:*** Coban 2 (Late Classic)

***Frequency:*** 1 base and 4 body sherds. 3 were subjected to a more detailed analysis.

***Principal identifying modes:*** 1) An open form with 2) a light red paste with ash or organic temper.

***Paste:*** The paste is light and reddish (10R4/4 to 6/3) with fine or medium volcanic ash or organic temper. There are often pebble inclusions, and some of the sample has a dark nucleus.

***Surface:*** Some pieces of temper are visible on the surface, which has fired to a dark grey. The majority of the sample has fire-clouding.

***Form:*** An open form with a flat base. The wall thickness is 11.8 mm (8-16 mm).

***Type:variety Designation:*** All of the sherds belong to the same type:

Grana Incensario (Arnauld 1986:356)

***Decoration:*** All of the sherds are undecorated.

***Interregional comparisons:*** All of the forms appear to be cylinders in Arnauld's sample (1986:356). Applications and/or incisions are common. The paste and surface are

identical to the present sample. For a general description of Late Classic unslipped types, see the discussion for Cambio Unslipped:Tzuul above.

***Intraregional comparisons:*** All of the sherds come from a cave in the Candelaria system near La Lima.

*Patepa Group* (13% of the Late Classic sample)

***Ware:*** Lanquin Unslipped

***Complex:*** Coban 2 (Late Classic)

***Sample:*** 672 sherds. 78 were subjected to a more detailed analysis. This sample is composed of 587 body sherds, 74 rims, 8 necks, 2 special bodies, and 1 base.

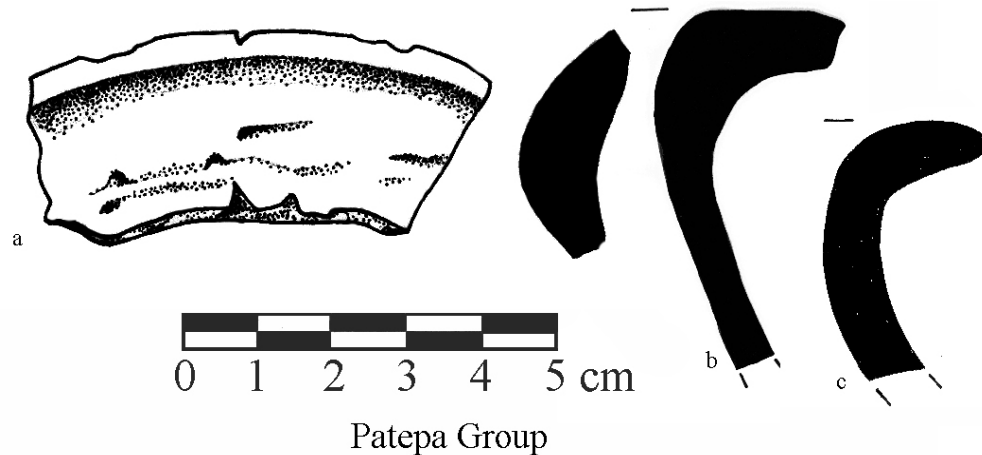
***Principal identifying modes:*** 1) A jar, comal, or bowl with 2) a thick, red paste and sand or ash temper.

***Paste:*** The paste is thick and dense with a variable color, from red (10R4/3 to 6/8) to yellowish orange (7.5YR5/6 and 6/6), but is most commonly red or reddish orange (2.5YR3/2 to 7/4). The temper is most commonly medium (46%) or fine (13%) sand, but occasionally fine (4%) or medium (2%) volcanic ash, or medium (5%) or large (6%) quartz. There are normally black (23%) or red (10%) inclusions, pebbles (24%), mica (4%), quartz (5%), or pumice (3%). There is a blackened nucleus present in 49% of the sample, which is normally thick.

***Surface:*** The surface has been somewhat smoothed and has fired to a dark red. There is fire-clouding present in 17% of the sample.

**Forms:**

1) A jar (96%) with a rounded (32%), squared (3%), pointed (11%), exterior (5%) or interior (5%) beveled, or grooved (45%) lip. The diameter is 18 cm (8-27 cm). The majority of cases have a rim that is folded over 90 degrees at the top of the vessel. The wall thickness is 8.4 mm (4-14.8 mm).



**Figure 7-7: Patepa Group, a-c) Patepa Unslipped: Patepa**

2) A bowl (1%) with a rounded, squared, grooved, or exterior beveled lip and a flat base. The lip is often bolstered on the exterior. One example has a flat base. The diameter is 18.7 cm (12-24 cm), and the wall thickness is 11.1 mm (6.2-14.9 mm).

3) A lowland style comal (1%) without walls with a rounded lip and a 48 cm diameter. The wall thickness is 11.5 mm.

4) A highland comal (1%) with slightly sloping walls and a lip that is pointed or with an interior or exterior bevel. The diameter is 44 cm (38-51 cm), and the wall thickness is 8.7 mm (7.1-9.9).

**Type: variety Designation:** These sherds all belong to the same type:

Patepa Unslipped:Patepa (This group was established by Monterroso (2006:28) as the ware Rough Volcanic Red. The group and type designation is established here, figure 7-7 a-c)

**Decoration:** These sherds are undecorated.

**Interregional comparisons:** This type appears to be unique to the present region, although the everted neck is reminiscent of a common form for Osoquin at Salinas de los Nueve Cerros (Dillon 1979:51-2, see below). For a general description of Late Classic unslipped types, see the discussion for Cambio Unslipped:Tzuul above.

**Intraregional comparisons:** This group is present in La Caoba Vieja, La Lima, and caves in the eastern part of the Candelaria system. Jars are by far the most common form in Candelaria and La Lima, although bowls or comales are occasionally present there. All of the examples from La Caoba Vieja are bowls. The lip is widely variable—in Candelaria it is most commonly pointed, followed by rounded or squared; while it is most commonly rounded in La Lima, there is some variation. The only example from La Caoba Vieja has an interior bevel. The paste is exclusively sand in La Lima and quartz in La Caoba Vieja and is most commonly sand in Candelaria, followed by quartz and ash.

*Chanchan Group* (less than 1% of the Late Classic sample)

**Ware:** Lanquin Unslipped

**Complex:** Unknown

**Sample:** 3 complete vessels and a partial vessel

**Principal identifying modes:** 1) A squat bowl or cup with 2) a rough, unslipped surface.

**Paste:** Unknown (whole vessel).

**Surface:** The surface is rough, unevenly-made and unslipped

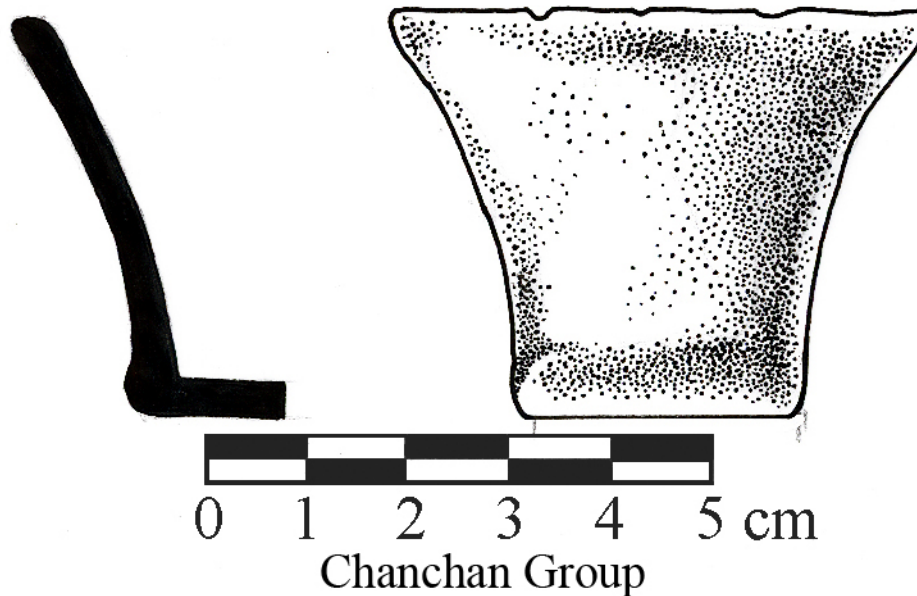
**Forms:**

1) A large, squat bowl with heavily-everted rims (reminiscent of La Isla Orange, see discussion below) with a 32.5 cm diameter.

2) A rough, small cup with outflaring lips.

**Type:variety Designation:** All of the sample belongs to the same type, which is established here:

Chanchan Unslipped:Chanchan (figure 7-8)



**Figure 7- 8: Chanchan Group, Chanchan Unslipped:Chanchan**

**Decoration:** These vessels are all unslipped.

**Interregional comparisons:** For a general description of Late Classic unslipped types, see the discussion for Cambio above, and for small cups see the description for K'uk' and Puñazo above..

**Intraregional comparisons:** This group is only found in the Cave of Hun Nal Ye. The bowl form is most closely related to La Isla Orange and Zapotal Impressed, which is why

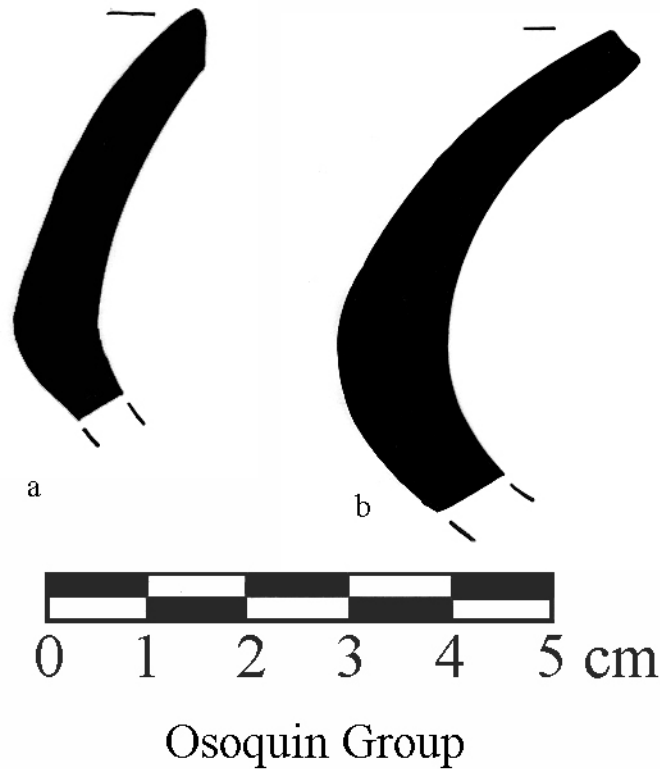
it was categorized as Late Classic, while the cups were found cached under broken Late Classic vessels.

***Acalaha Unslipped Ware***

*Osoquin Group* (22% of the Late Classic sample)

**Ware:** Acalaha Unslipped

**Complex:** Salinas Late Classic



**Figure 7- 9: Osoquin Group, a-b) Osoquin Unslipped:Osoquin**

**Sample:** 1,137 sherds. 104 were subjected to a more detailed analysis. The sample includes 1055 body sherds, 62 rims, 13 necks, 4 appendices, and 3 special bodies.

**Principal identifying modes:** 1) A jar or bowl with 2) a somewhat porous surface; 3) orange paste with a combination of organic and either quartz or calcite tempers.

**Paste:** The paste is somewhere in between Cebada and Cambio and contains both organic elements and a calcite, quartz, or sand temper. The temper is most commonly large quartz (55%) or large (7%) or medium (6%) calcite mixed with the organics. There are occasionally ferruginous lumps (20%) or pebbles (10%) as well. A slight majority of sherds (52%) has a dark nucleus, which is nearly always thick. The color tends to be a light (5YR5/6 to 6/4) or reddish (2.5YR5/4 to 6/4) orange.

**Surface:** The surface looks similar to Cebada Porous, although with fewer pores and occasional flecks of other temper materials showing on the surface. The paste tends to fire to a light tan on the exterior. There is dark fire-clouding present on the exterior of 23% of the sample.

**Forms:**

1) A jar (90%) with a constant “C”-curve from the body to the rim. The lip is rounded (57%), squared (8%), exterior beveled (9%), or shallow grooved (26%). There is occasionally a slight groove above the lip. The neck is 3.6 cm tall (2.5-5.5 cm), the diameter is 24.7 cm (22-51 cm), and the wall thickness is 8.4 mm (3.1-15.1 mm).

2) An open, rounded bowl (9%) with a rounded (93%) or pointed (7%) lip. The diameter is 31 cm (27-32 cm) and the wall thickness is 10.6 mm (7.3-11.8 mm). The rim is sometimes folded out 90 degrees at the top.

3) A general bowl form (1%) with a pointed (50%) or shallow-grooved (50%) lip and a 23.5 cm diameter (23-24 cm). One example has an exterior-thickened rim. The wall thickness is 11.2 mm (8.5-13.9 mm).

**Type:variety Designation:** All of the sherds belong to the same type:

Osoquin Unslipped:Osoquin (Dillon 1979:51, figure 7-9 a-b)



**Decoration:** These sherds are all undecorated.

**Interregional comparisons:** This type is only found at Salinas de los Nueve Cerros (Dillon 1979:51-2) and the present region. The paste and surface treatment is identical to this sample, although there is a wider variation in form in Salinas. The jars are large with restricted mouths and incurved or flaring sides. The necks are everted or outcurving, with rounded or squared lips. Unlike the present sample, there is often a slight indentation at the neck-body juncture.

For a general description of Late Classic unslipped types, see the discussion for Cambio above.

**Intraregional comparisons:** This group is present in La Lima and associated caves in the Candelaria system, La Caoba Vieja, and Tres Islas. It is also present in the Cancuen assemblage (pers. obs. 2006). Bowls are rare but present in La Lima and Tres Islas but absent in the caves. The lip is most commonly rounded throughout the region, but at La Lima the other types described above are also present. The organic temper is most commonly mixed with calcite in la Caoba Vieja, Candelaria, and Tres Islas, with sand in La Lima, and with a calcite and quartz mix in caves in the San Francisco Hills.

## **Monochromes and Dichromes**

### ***Petén Glossy***

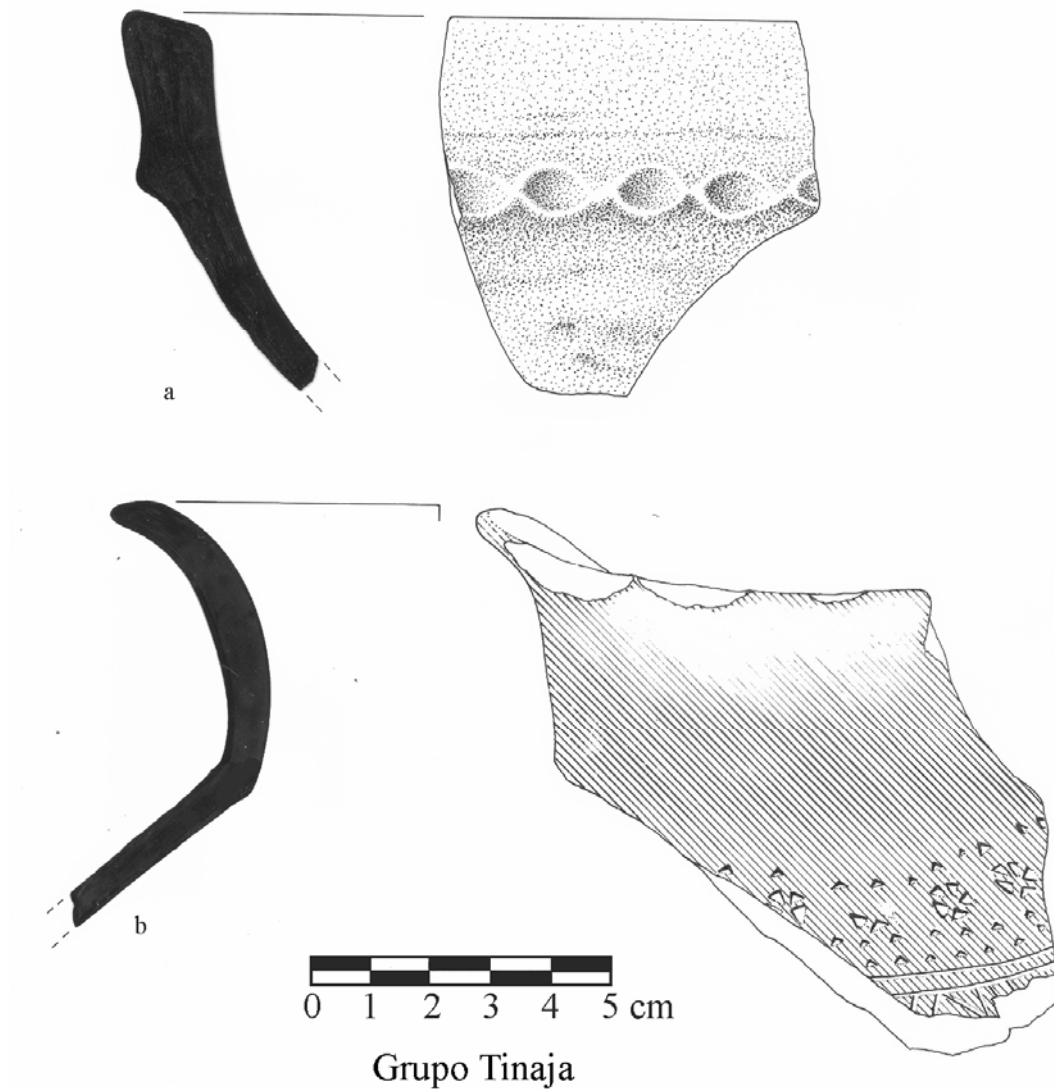
*Tinaja Group* (2% of the Late Classic sample)

**Ware:** Petén Glossy

**Complex:** Tepeu

**Sample:** 104 sherds and 1 complete vessel. 72 were subjected to a more detailed analysis. The sample includes 51 body sherds, 26 special body sherds, 14 rims, 9 necks, 3 rim-to-base sherds, and 1 base.

**Principal identifying modes:** 1) A jar or bowl with 2) a red slip and 3) a red or orange paste with quartz or sand temper.



**Figure 7- 10: Tinaja Group, a) Chaquiste Impressed:Chaquiste, b) Pantano Impressed:Pantano**

**Paste:** The paste varies from orangish red (10R4/8 to 7/6) and light orange (5YR6/3 to 8/4), with no preference for a particular shade. The temper is most commonly fine (25%) or medium (17%) quartz, a mixture of medium calcite and quartz (17%), or fine (13%), medium (8%), or large (7%) calcite. Fine (6%) or medium (1%) sand, large quartz (3%), or medium volcanic ash (3%) are all occasionally used. There are normally black (68%) or red (11%) ferruginous lumps, in one case with mica mixed in, but mica (1%), quartz (1%), pebbles (1%), and pumice (1%) are all occasionally used. There is occasionally a dark nucleus present (28%), which is normally thin.

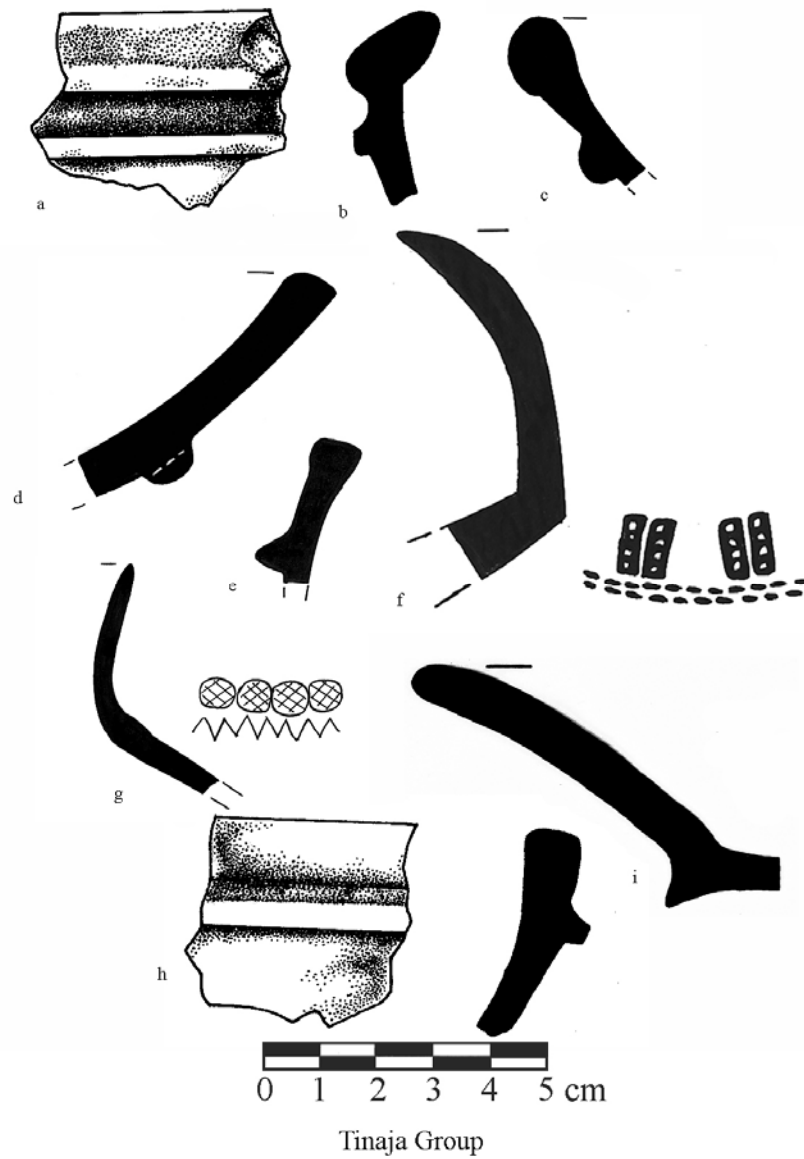
**Slip:** The surface is slipped a dark red (7.5R3/6 or 3/8), an orangish red (10R3/6 to 5/8), or a reddish orange (2.5YR5/8 or 6/8), occasionally with a cream underslip (7% of the sample). There is fire-clouding present in 20% of the sample. A full 52% of the ceramics have a completely eroded slip, but of the remaining sample, it is most common to have an exclusively exterior slip (24%) or a slip on both sides (13%); in both cases the base is slipped as well. Exclusively interior slip is rare (1%), and the rest of the sherds have evidence of zoned slipping, with the interior slipped and the upper part of the exterior on bowls and the exterior and interior neck on jars. In 3% of the sample only the upper exterior is slipped.

**Forms:** 3% of the sample is of an indeterminate form.

1) An elongated jar (61%) with a sharp angle at the joint between the body and the flaring neck, normally with evidence of smoothing on the interior where the two pieces were put together.. The lip is rounded (14%), shallow grooved (14%), squared (57%), or pointed (14%) with a 17.4 cm diameter (9-32 cm). The neck height is 3.9 cm,

(3.6-4.3 cm) and the wall thickness is 7.6 mm (4.4-10 mm); one complete vessel stands 24.4 cm tall.

2) A large, slightly incurving bowl (21%) with a medial molding 4.1 cm below the lip (1.5-15.5 cm). The lip is rounded (58%), squared (21%), interior-beveled (16%), or exterior-beveled (5%) lip. The diameter is 34 cm (18-60 cm), and the wall thickness is 10.2 mm (5.9-14.1 mm).



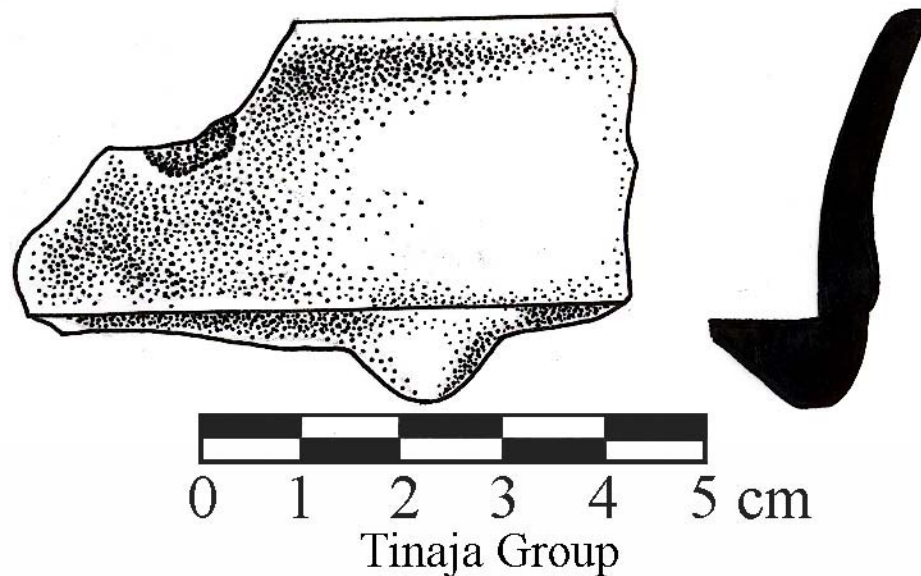
**Figure 7- 111: Tinaja Group, a-c) Subin Red; d, e) Tinaja Red; e) Subin Red:Fine; f-g) Pantano Impressed:Stamped; h) Subin Red:Bocal**

3) A bowl with sloping walls (7%), an interior beveled or rounded lip, and a 40.8 cm (25-82 cm) diameter. The wall thickness is 7.3 mm (7-7.7 mm).

4) A general bowl form (5%) with a wall thickness of 6.4 mm (3.5-9.1 mm).

5) A tripod plate with flaring walls (2%). One nearly complete example has a flat base, a rounded lip, and nubbin feet that are 1 cm tall. The entire vessel stands 3.9 cm with a 17 cm diameter. The other has a lip with an interior bevel. The wall thickness is 6.9 mm (6.8-7 mm).

6) A tripod plate with sloping walls (1%) and a lip with an interior bevel. The diameter is 24 cm and the wall thickness is 7 mm.



**Figure 7- 122: Tinaja Red: Tinaja**

**Type: variety Designation:** Red is normally the most common slip color in the Petén during the Late Classic, and there is considerable debate as to how to classify red-slipped sherds. R.E. Smith and Gifford (1966) originally named Tinaja Red as a Tepeu 3 type, with Tasital and Nanzal as Tepeu 1 and 2, respectively. The differences as defined by

Smith among the three different periods are minimal at best and were most likely based on context more than form or paste.

Adams (1971:23-4) and Sabloff (1975:116-8, 158-60) kept Nanzal and Tinaja, but dropped Tasital Red altogether. Adams also defined several other varieties of Tinaja (including Aduana, discussed in the previous chapter) and two new types, but Forsyth (1989:83) believes that they can be subsumed into Tinaja Red.

There is some debate as to how to divide Tinaja and Nanzal, however. Sabloff (1975:117) maintains R.E. Smith and Gifford's type designations, while Forsyth (1989:80) redefined R.E. Smith and Gifford's types on a varietal level. For both, the distinction is slip color, although their designations are opposites—Nanzal has a thin, dark red slip in the Mirador collection and a light red or orange slip at Seibal. There is no Tinaja variety present at Mirador, although he does identify the lighter-slipped Tinaja variety at other sites in the Petén, while Sabloff uses Tinaja to include all of the darker slipped sherds.

A second debate regards Subin Red, a type originally defined by Adams at Altar de Sacrificios (Adams 1971:22-3). Most ceramicists have relegated Subin to a variety of Tinaja Red, noting that the only major difference between Subin and Tinaja is form (Subin is restricted to a large round bowl with a medial ridge, whereas Tinaja has a plethora of forms). I have resurrected the type designation because it is possible to separate Subin itself into 5 different varieties in the sample. The slip is also distinct from Tinaja Red; it is much more fragile and easily erodeable.

All of the varieties are based on paste differences and wall thickness. Three varieties were defined at Altar de Sacrificios—Subin, Huicoy, and Bocul. Subin has a 5-

8 mm thickness and exclusively sand temper. Huicoy is much thicker (8-11 mm) with large calcite particles mixed into the paste. Bocul is thin like Subin but has sand or calcite temper. Subin normally has a black-smudged interior as well. Two more varieties were present in the Salinas collection (Dillon 1979:88-90) but were only listed as paste variants—1) pinkish, soft, fine paste with some pebble or quartz inclusions and red specks and 2) gritty paste with sand or pumice temper. They are referred to here as Fine and Volcanic varieties.

I believe that differences in slip and form are enough to warrant placing Subin and Chaquiste (Subin with additional stamping or impressing) into a separate group, but for the purposes of this analysis I have taken a more traditional approach:

Tinaja Red:Tinaja (R.E. Smith and Gifford 1966:163)—56 sherds (figure 7-11 *d*, *e*; 7-12)

Tinaja Red:Aduana (see previous chapter)

Pantano Impressed:Pantano (R.E. Smith and Gifford 1966:160)—10 sherds (figure 7-10 *b*), one modified sherd, and one complete vessel

Pantano Impressed:Stamped (R. Adams 1971:47)—8 sherds (figure 7-11 *f-g*)

Chaquiste Impressed:Chaquiste (R. Adams 1971:47)—6 sherds (figure 7-10 *a*)

Subin Red:Subin (R. Adams 1971:23)—5 sherds (figure 7-11 *a-c*)

Subin Red:Bocal (R. Adams 1971:22)—4 sherds (figure 7-11 *h*)

Subin Red:Huicoy (R. Adams 1971:22)—1 sherd

Subin Red:ND/volcanic paste (Dillon 1979:88 described the sample of Subin Red present at Salinas de los Nueve Cerros, which included this variety)—1 sherd

Subin Red:ND/fine paste (Dillon 1979:88)—5 sherds (figure 7-11 *e*)

Zopilote Smudged:Zopilote (R. Adams 1971:24)—4 sherds

Camérón Incised:Camérón (R.E. Smith and Gifford 1966:155)—1 sherd

***Decoration:***

1) *Plain:* The undecorated material covers all of the forms and most of the paste types.

2) *Impressed:* Simple geometric patterns were impressed on the shoulder just below the rim. 33% of the sample has dark fire-clouding present on the surface. This type of decoration is limited to jars.

3) *Stamped:* Stamped, complex geometric designs encircled the necks of several jars (Pantano) or the field between the rim and a medial ridge (Chaquiste).

4) *Incised:* Decorated with simple designs done with post-firing incisions. Incisions only appear on sloping-walled bowls in the sample.

***Interregional comparisons:*** As observed above, this type has been defined into several varieties or split into several types in inconsistent or insignificant ways. It is a very common and variable type, appearing in a myriad of forms and colors. Tinaja Red has been identified at Uaxactun (R.E. Smith and Gifford 1966), Tikal (Culbert n.d.), El Mirador (Forsyth 1989:79-86), Seibal (Sabloff 1975:116-8, 158-60), Altar de Sacrificios (Adams 1971:23), the Petexbatun (Foias 1996:468-78), Calakmul (Domínguez Carrasco 1994:182), La Joyanca (Forné 2005:386-7), Piedras Negras (Holley 1983:383-8), Yaxchilan (López Varela 1989:125), and the southwestern Petén (Laporte *et al.* 1993:113-4).

At most sites outside of the present region, different plate and bowl forms are the most common. At Seibal, however, jars are common in Tepejilote (Late Classic) Nanzal



and are the dominant form in Bayal (Terminal Classic) Tinaja. The paste normally has calcite temper, although it has sand at Altar de Sacrificios. The jars in the present sample tend to have wider mouths than in other regions.

Orange- and red-slipped types have been identified in the northern highlands and are described below (Culantro Orange, Gladiola Red). In Tonina, Chijilte Red-Orange (Becquelin and Baudez 1985:249-52) is nearly identical to Tinaja and is as variable in form. In Belize, the red-slipped vessels normally have ash temper (British Honduras Volcanic Ash Ware (Gifford 1976:255), although Tinaja has been identified at several sites (c.f. Valdez 1987:194).

At Salinas de los Nueve Cerros, Dillon identified 7 varieties of Unnamed Red that correspond to the Late Classic period in addition to Cotebal, which continues from the Early Classic (see description in the discussion for Águila in the previous chapter and Jekcha below).

Pantano Impressed: Pantano is present at a wide array of sites throughout the lowlands, at Uaxactun (R.E. Smith and Gifford 1966:160), Tikal (Culbert n.d.), El Mirador (Forsyth 1989:91), Naj Tunich (Brady 1989:211), Calakmul (Domínguez Carrasco 1994:199), La Joyanca (Forné 2005:39203), Colha (Valdez 1987:195), Altar de Sacrificios (Adams 1971:48), Seibal (Sabloff 1975:164-6), Itzan (Johnston 1994:205), Yaxchilan (López Varela 1989:161), Salinas de los Nueve Cerros (Dillon 1979:230-1), in the Petexbatun region (Foias 1996:494-7), and the Dolores Valley (Laporte *et al.* 1993:115).

The stamped variety of Pantano is much more restricted than the Pantano Variety and is mostly restricted to the southern Petén. It is present at Seibal (Sabloff 1975:168),

Altar de Sacrificios (R. Adams 1971:47), Itzan (Johnston 1994:205), El Mirador (Forsyth 1989:91), Calakmul (Domínguez Carrasco 1994:203), Salinas de los Nueve Cerros (1979:231-2), and in the Petexbatun region (Foias 1996:489-94) and the Dolores Valley. Foias (ibid.) also found similar jars from collections at Mountain Cow, Lubanntun, and Wild Cane Cay. Everything is similar to the present collection with the exception of the paste, which is rarely quartz outside of the present region.

Subin is mostly restricted to the southern Petén, found at Altar (Adams 1971:22-3), Seibal (Sabloff 1975:160-4), Yaxchilan (López Varrela 1989:123), Itzan (Johnston 1994:204-5), Calakmul (Domínguez Carrasco 1994:190), Salinas de los Nueve Cerros (Dillon 1989:88-90), Colha (Valdéz 1987:194), and the Dolores Valley (Laporte *et al.*, 1993:114). At Seibal and Altar de Sacrificios, the collection seems to be the Bocul variety. At Yaxchilan it is most likely Huicoy. Foias (1996:482-3) has found red-slipped ceramics with the same form as Subin at Barton Ramie and Uaxactun. The presence of Subin Red at Calakmul is especially interesting since Calakmul dominated the Pasión area, where it is most common, during much of the Late Classic.

Subin Red:Huicoy might be present in the Yaxchilan collection (López Varela 1989:123), in addition to being at Altar (Adams 1971:22). Subin Red:Bocal might have been present in the Petexbatun (Foias 1996:478-83) and Seibal (Sabloff 1975:162) collections, in addition to Altar de Sacrificios (R. Adams 1971:22-3). The other two varieties, ND/fine paste and ND/volcanic paste, have only been found at Salinas de los Nueve Cerros (Dillon 1979:88-90) and in the present sample.

Chaquiste Impressed is simply Subin Red with the addition of impressions that are normally on the medial ridge, and the distribution in the Maya lowlands is nearly

identical. Again, the only site in the Central Petén at which this type is present is Calakmul. Although Subin Red was not reported at La Joyanca, Chaquiste was present in both stamped and impressed varieties (Forné 2005:388-90).

Zopilote Smudged is mostly restricted to the southern Petén, present at Seibal (as an Unnamed Bichrome, Sabloff 1975:222), Altar de Sacrificios (R. Adams 1971:24-5), Itzan (Adams 1994:204), Yaxchilan (López Varela 1989:1321), and the southeastern Petén (Laporte, pers. comm. 2006). Unnamed Dichrome: Xelub at Salinas de los Nueve Cerros (Dillon 1979:105-6) is identical to Zopilote. It is probably a lowland application of the common northern highland mode of smudging the interior of vessels. The average diameter is identical to the present sample at Seibal (24 cm); the plates from the Petexbatun are slightly larger (28 cm).

Incised sherds are found at most sites where the group is present.

***Intraregional comparisons:*** This group and the undecorated type are found in the northern half of the region—the San Francisco Hills, La Caoba Vieja, and Tres Islas. The dominant variety of Pantano Impressed is found in the northern  $\frac{3}{4}$  of the region, from Candelaria to Tres Islas, while the stamped sherds are only found in La Caoba Vieja and the San Francisco Hills. Chaquiste Impressed sherds are from the San Francisco Hills and Tres Islas.

Subin is only found in the northern  $\frac{3}{4}$  of the region. The Subin, Huicoy, fine, and volcanic varieties are found in Tres Islas while the Bocal variety is found in the Candelaria system. Camerón Incised is found in Tres Islas, and Zopilote Smudged is found in both Tres Islas and Candelaria.

*Infierno Group* (less than 1% of the Late Classic sample)

**Ware:** Petén Glossy

**Complex:** Tepeu

**Sample:** 15 sherds and one complete vessel, 8 of which were subjected to a more detailed analysis. The sample consists of 9 body sherds, 4 rims, 2 rim-to-base sherds, and 1 appendix.

**Principal identifying modes:** 1) A plate or jar with 2) a solid black slip and 3) a red or orange paste with quartz or calcite temper.

**Paste:** The paste varies in color from red (10R5/8 to 8/3) to light orange (5YR7/3), mostly leaning towards the former. The temper is most commonly fine (38%) or medium (38%) quartz, but there are a few examples that are medium calcite (13%) or a mixture of calcite and quartz (13%). There are black (50%) or red (43%) ferruginous inclusions in the majority of the sample and occasionally (38%) a thick dark nucleus.

**Slip:** A consistent black slip was applied either onto a cream underslip (25% of the sample) or directly onto the pre-fired surface of the vessel (75%). The slip is normally limited to the exterior (56%), but 38% of the sample is slipped on both sides, apparently only to the base. 1 sherd has indeterminate slip placement.

**Forms:** 13% of the sample is of an indeterminate form

1) A general jar form (44%) with a wall thickness of 5.4 mm.

2) A tripod plate with sloping walls (13%) and hollow hemispherical feet that are 4.2 cm tall. The base is rounded, as is the lip. There is a small, unmodified basal flange 3.9 cm below the rim. The diameter is 24.5 cm (20-29 cm), and the vessel stands 5.6 cm tall without the supports. The wall thickness is 6.8 mm (5.9-7.6 mm).

3) A plate with flaring walls (13%) that has a rim with an interior bevel. The base is flat, the diameter is 22.5 cm (20-25 cm), and the vessel stands 4.6 cm tall. The wall thickness is 7.2 mm (6.5-8 mm).

4) A tripod plate with flaring walls (13%), a rounded lip, and a 25 cm diameter with a wall thickness of 3.8 mm.

5) A general plate form (6%) with a wall thickness of 6.5 mm.

**Type:variety Designation:** There is a lot of inconsistency for naming black types in the Late Classic, which is largely based on the creation of 3 types in the Uaxactun sample—Molino, Infierno, and Achote for Tepeu 1, 2, and 3, respectively. The chronological differences appear to be slight throughout the Late Classic, however, and so the three types are normally grouped together, although the naming is not consistent. I have followed the lead of Laporte, Forsyth, and others in the designation for this sample.

Two different varieties of Infierno Black were identified:

Infierno Black:Infierno (R.E. Smith and Gifford 1966:172)—13 sherds and 1 complete vessel

Infierno Black:ND/thin wall (Laporte pers. comm. 2006)—2 sherds

**Decoration:** All of the sherds were undecorated.

**Interregional comparisons:** This group is present at many sites throughout the lowlands—Uaxactun (Gifford 196:168), La Joyanca (Forné 2005:403-4), Yaxchilan (López Varela 1989:121), El Mirador (Forsyth 1989:93-7), Calakmul (Domínguez Carrasco 1994:149), Seibal (Sabloff 1975:118), and the Petexbatun region (Foias 1996:532-9) and the Dolores Valley (Laporte *et al.* 1993:100). At Altar de Sacrificios (Adams 1971:21), it is called Achote, which is also identified at Yaxchilan (López

Varela 1989:101). Culbert (n.d.) established the Zacec type for black-slipped sherds at Tikal in the Late Classic, but there appears to be little difference between his and other samples. There is a wider variation of forms at most other sites than in the present sample, although all of the forms present here are common, with the exception of jars. Jars are only present in the Dolores Valley, Seibal, and El Mirador

At Salinas de los Nueve Cerros, Lucum continues into Tepeu 1 (see description for Balanza in the previous chapter) and 3 other varieties of Unnamed Black date to the Late Classic, in addition to Infierno Black (Dillon 1979:95-9). A single black-slipped partial vessel was found at Tonina (Bequelin and Baudez 1984:266), a miniature cup that has been smudged on the interior and exterior (this type would actually appear to be similar in decoration style to Sechochoc Black below). A similar black type, “Undesignated Fine Paste Black Type A” (Holley 1983:423-4) also has a smudged black interior and exterior but only exists in a general bowl and lid form. Black-slipped vessels are not present in Alta Verapaz until the Postclassic.

Thin-walled examples of this type have been found in the Petexbatun (Foias 1996:536) and make up the majority of the sample at Altar (R. Adams 1971:25). The variety was identified by Laporte in the Atlas sample.

***Intraregional comparisons:*** The standard variety was found in the northern part of the region, in the eastern part of the San Francisco Hills and Tres Islas. The thin-walled sherds are limited to the eastern part of the San Francisco Hills.

***Observation:*** Black slip in the Late Classic lowlands is much more solid and consistent than in earlier periods and in the local group, Sechochoc.

*Azote Group* (less than 1% of the Late Classic sample)

**Ware:** Petén Glossy

**Complex:** Tepeu



**Figure 7- 13: Azote Group, Torres Incised:ND/post-firing incisions**

**Sample:** 2 body sherds, both of which were subjected to a more detailed analysis..

**Principal identifying modes:** 1) A rounded bowl with 2) a dull orange slip and complex geometric, incised designs on the exterior; 3) red or orange paste with quartz temper.

**Paste:** The paste is an orangish red (10R6/6) or pinkish orange (2.5YR7/1) with medium quartz temper and ferruginous lumps.

**Slip:** The exterior of the vessel was slipped an uneven, dull orange (2.5YR6/8 or 5YR6/6).

**Form:** A small rounded bowl with a wall thickness of 4.4 mm (4.2-4.5 mm).

**Type:variety Designation:** Both of these sherds belong to the same type.

Torres Incised:ND/post-firing incisions (R.E. Smith and Gifford 1966:163 established the type at Uaxactun as a Tepeu 3 type. Laporte *et al.* (1993:96) redefined the Azote as the general Tepeu orange-slipped incised type. The variety is established here, figure 7-13)

**Decoration:** The decoration consists of complicated, post-firing geometric designs.

**Intraregional comparisons:** Both sherds were found in a cave in the eastern part of the San Francisco Hills.

**Interregional comparisons:** The Azote group is very rare at most Maya sites, and Torres Incised is less common than Azote Orange. This sample is different from most examples of Torres Incised because the incisions are normally pre-slip. In other respects, however, the form, paste, and slip color are similar to other examples of this type.

Torres Incised is present in the Petexbatun (Foias 1996:527-31), the Dolores Valley (Laporte *et al.* 1993:96-113), and Calakmul (Domínguez Carrasco 1994:211). A similar type, Kau Incised (Culbert n.d.) is present at Tikal and has similar, post-firing incisions although the form is almost completely restricted to cylinders. A few orange-slipped cylinders with parallel incisions were reported at Tonina (Becquelin and Baudez 1984:266).

Three orange-incised types are found in Late Classic contexts at Salinas de los Nueve Cerros: Ojo de Agua, Mutzchool, and Sakibac (Dillon 1979:175-8). The first and third types often have a black-smudged interior. Ojo de Agua Incised (which also appears at Altar de Sacrificios [Adams 1971:44]) has fine incisions. Mutzchool has very accurate, deep incisions, and Sakibac has a cream slip that fires orange. Sakibac is common at Cancuen, where it was formerly referred to as “Incised Orange” (Bill *et al.* 2003).

Two orange-slipped types identified by Arnauld in Alta Verapaz occasionally have post-firing incisions, Culantro (Arnauld 1986:342-3, see below) and Olola Orange (Arnauld 343-4).



*La Isla Group* (1% of the Late Classic sample)

**Ware:** Petén Glossy

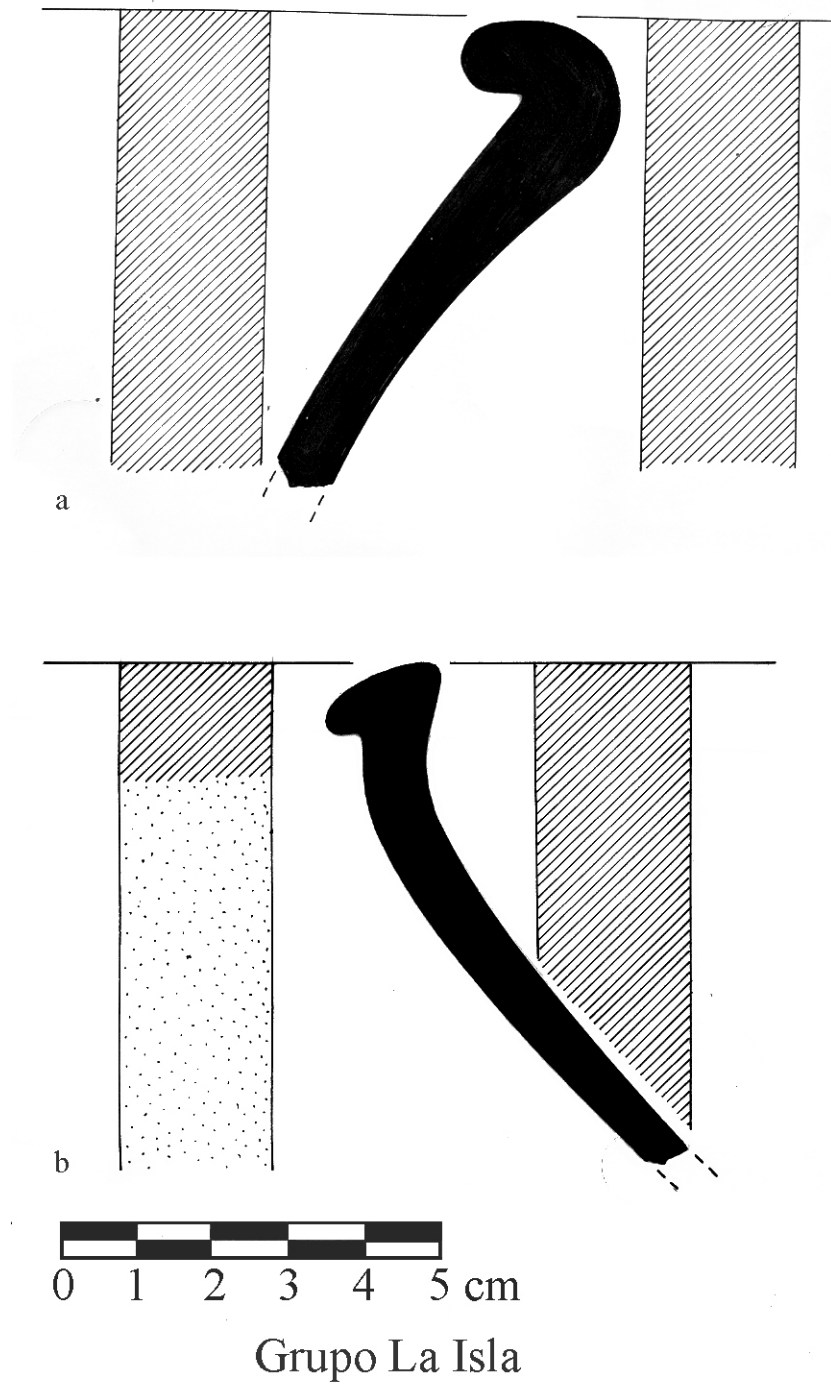


Figure 7- 14: La Isla Group, a-b) La Isla Orange

**Complex:** Tepeu 2

**Sample:** 54 sherds. 37 were subjected to a more detailed analysis. The sample consists of 38 rims, 10 bases, and 6 body sherds.

**Principal identifying modes:** 1) A round, open bowl with a folded lip; 2) orange primary slip; 3) red, orange, or yellow slip with a somewhat spongy appearance and a calcite and quartz temper.

**Paste:** The paste is light and slightly spongy and varies between red (10R6/6 to 8/3) and yellow (7.5YR7/3), but mostly reddish yellow (2.5YR6/6 to 7/6) or light orange (5YR6/1 to 8/3). The temper is most commonly a mixture of medium calcite and quartz (33%) or fine (13%) or medium (38%) quartz, although medium (8%) to large (3%) calcite, large quartz (3%), and medium volcanic ash (3%) are all present in a small segment of the sample. There are normally black (55%) or red (31%) ferruginous inclusions; occasionally organic materials are added in their place. A dark nucleus is present in the majority of the sample (80%).

**Slip:** The slip varies within the sample from an orangish red (10R3/6 to 4/6) to a yellowish red (7.5YR4/4 or 7/6) and is found on the interior of the vessel and on the exterior between the lip and the widest part of the bowl. 5% of the sample has a cream underslip and there is fire-clouding present in 14% of the sherds. 34% of the sherds are slipped on both sides, 22% were slipped on the interior, and 9% appear to have been slipped only on the exterior. 33% of the sherds were slipped on the interior and the upper part of the exterior.

**Forms:**

1) A very wide, round bowl with slightly incurving walls (98%), normally with a folded-over, rounded rim and a 30.9 cm diameter (22-51 cm). Two examples have an

interior beveled rim with either an interior bolster or a incurving lip. One example has a flat base. The wall thickness is 8.7 mm (4.2-14.1 mm).

2) A rounded bowl similar to the primary form but completely open (2%) with a wall thickness of 7.7 mm and a diameter of 51 cm. The lip is rounded and folded over.

**Type:variety Designation:** These sherds belong to two pre-established types

La Isla Orange:La Isla (Bill 2001:165)—42 sherds (figure 7-14)

Zapotal Impressed:Zapotal (Bill 2001:166 established the type as “El Zapote Impressed,” although the name has been changed here to avoid confusion with Zapote Striated)—12 sherds

**Decoration:**

1) *Plain:* These sherds were found in the entire area and have both of the forms listed above.

2) *Impressed:* Digital impressions below the rim, which mark the end of the exterior slip. There is fire-clouding present in 40% of the sample. The decoration is limited to form 1 for this group.

**Interregional comparisons:** This group has only been found in this region and is one of the markers of the Cancuen sphere in the Late Classic. It is identical to the sample there.

**Intraregional comparisons:** Undecorated sherds were found in the northern half of the region—most of the caves in the San Francisco Hills, La Caoba Vieja, and Tres Islas, whereas the impressed sherds were only found in the San Francisco Hills and La Caoba Vieja.

*“Polished Black” Group* (less than 1% of the Late Classic sample)

**Ware:** Unknown

**Complex:** Unknown

**Sample:** 2 body sherds and 1 base, all of which were subjected to a more detailed analysis.

**Principal identifying modes:** 1) A bowl or jar with 2) a burnished black slip; 3) light, slightly spongy, red or orange slip and sand or organic temper.

**Paste:** Like La Isla Orange:La Isla, the paste is light and slightly spongy. It is normally light red (10R5/6 or 6/8) to reddish orange (2.5YR6/4) with fine sand or organic temper. Two of the examples have a thick dark nucleus.

**Slip:** The slip is black and heavily polished, giving it a character between glossy and waxy. The two body sherds were slipped on both sides; the third has evidence of slip on the exterior to the base.

**Forms:**

- 1) A general bowl form with a wall thickness of 6.1 mm (5.9-6.2 mm).
- 2) A general jar form with a flat base and a wall thickness of 8.8 mm.

**Type:variety Designation:** These sherds were all classified as the same preliminary type:

“Polished Black” (Bill and Callaghan 2002)

**Decoration:** These sherds are all undecorated.

**Interregional comparisons:** This type is only found here and at Cancuen; the samples appear to be identical. For a general description of black-slipped types in the Late Classic, see the discussion for Infierno Black:Infierno above.

***Intraregional comparisons:*** This group was found in the central part of the San Francisco Hills and Tres Islas.

***Fine Grey Ware***

*Chablekal Group* (less than 1% of the Late Classic sample)

***Ware:*** Fine Grey

***Complex:*** Tepeu 2

***Sample:*** 2 rim sherds and a body-and-base sherd, all of which were subjected to a more detailed analysis.

***Principal identifying modes:*** 1) A plate with 2) some evidence of a black slip and complex incisions on the exterior; 3) very fine orange paste with quartz temper.

***Paste:*** The paste is a light orange (5YR6/3) with fine quartz temper, ferruginous inclusions, and a thick black nucleus.

***Surface treatment:*** The vessels were originally slipped black, but little is remaining.

***Form:*** A flaring plate with a squared lip and a flat base. The diameter is 21 cm (20-22 cm), and the wall thickness is 5.0 mm (3.5-6.3 mm).

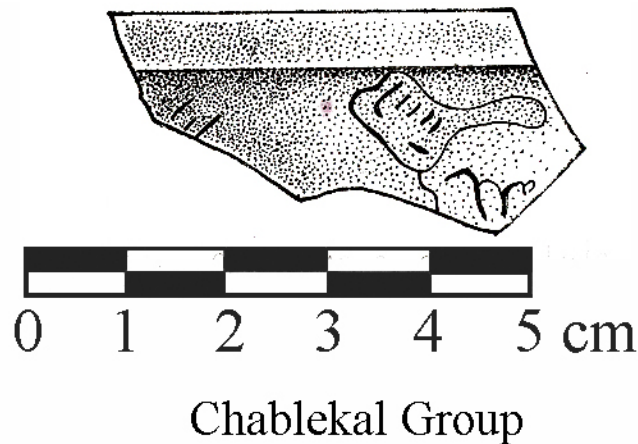
***Type:variety Designation:*** All of these sherds belong to the same type”

Chicxulub Incised:Chicxulub (R.E. Smith and Gifford 1966:156, figure 7-15)

***Decoration:*** These sherds are all have incisions on the exterior of the vessel forming anthropomorphic figures in various poses.

***Interregional comparisons:*** This type and the Chablekal Group appear to have been restricted to the western and northern Maya lowlands. It has been reported at Uaxactun (R.E. Smith and Gifford 1966:156), Yaxchilan (López Varela 1989:54-5), Tikal (Foias

1996:590), Calakmul (Domínguez Carrasco 1994:280), Cancuen (Bill *et al.* 2003), La Joyanca (Forné 2005:460-4), Tonina (Becquelin and Baudez 1984:262-265), the Palenque area (Rands 1987:226), Piedras Negras (Holley 1983:427-8), the Petexbatun (Foias 1996:587-613), Edzna (Forsyth 1983:119) and throughout northern Yucatan (Ibid., R.E. Smith 1971). The largest quantity of material from this group is from the Palenque region, where it likely originated, but it is present in large numbers at Dos Pilas and Cancuen as well.



Chablekal Group

**Figure 7- 15: Chablekal Group, Chixculub Incised:Chixculub**  
*Intraregional comparisons:* Sherds in this group were recovered from La Caoba Vieja.

***Imitation Fine Grey Ware***

*Chachab' Group* (3% of the Late Classic sample)

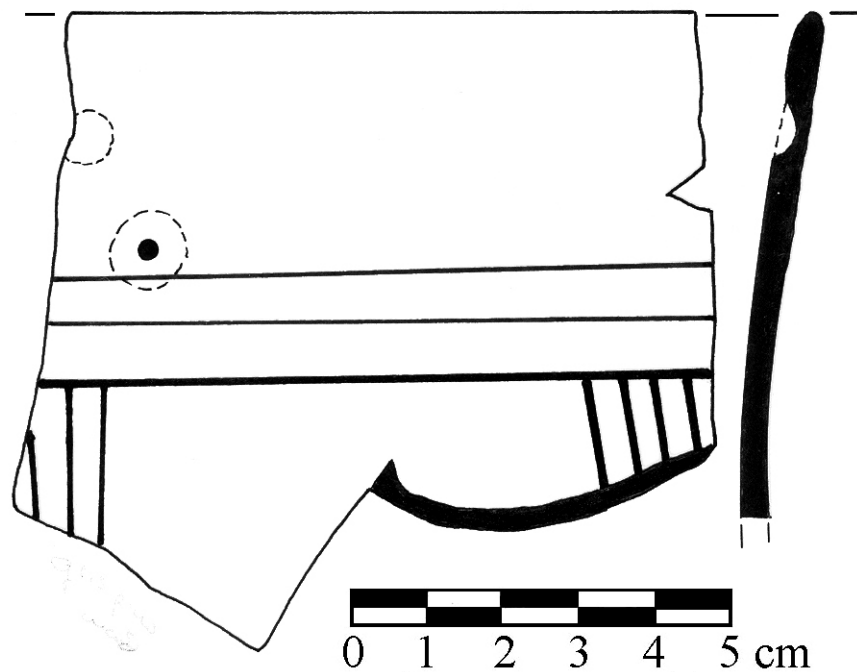
**Ware:** Imitation Fine Grey

**Complex:** Ru

**Sample:** 147 sherds, 35 of which were subjected to a more detailed analysis. 98 of the sherds are body sherds, 58 are rims, 1 is a special body, and 10 are bases.

**Principal identifying modes:** 1) A plate, bowl, or cylinder with 2) a rough, powdery grey or brown exterior and 3) some evidence of an orangish or tannish slip; 4) red or tan volcanic paste.

**Paste:** The paste is heavily tempered with volcanic ash and glass (69%) or, occasionally, fine (29%) or medium (3%) sand. The color spans from light red (10R5/6 to 6/6) to tan (10R7/3 to 8/4) but mostly focuses on orangish tan (5YR5/4 to 8/4). The most common inclusions are red ferruginous lumps (23%), but there is one example each (3%) of pumice and black ferruginous inclusions. A thick dark nucleus is present in just under half of the sample (45%).



### Chachab' Group

**Figure 7- 16: Chachab' Group, Sechaj Incised:Sechaj**

**Slip:** Like Chablekal group ceramics, most of the original slip has eroded, although there are traces of orangish (2.5YR4/4, 5YR3/3 and 4/1) or tannish (10YR3/1 and 4/1) slip.

The present surface is rough from the pumice and volcanic glass that was mixed into the paste. The surface is often a shade of grey or brown.

**Forms:** 5% of the sample is of an indeterminate form, which in one case has evidence of a small basal flange.

1) A general cup form (57%) with a flat (11%) or ring (89%) base and, in one case, with a rounded lip. The wall thickness is 6 mm (5-7 mm), and the diameter is 15 cm.

2) A probable tripod plate with flaring walls (16%), a rounded lip, a flat base, and a 22 cm diameter (21-23 cm). The wall thickness is 4.6 mm (4.2-5.1 mm).

3) A probable tripod plate with sloping walls (5%) and a rounded lip with a 16.5 cm (16-17 cm) diameter. The wall thickness is 4.7 mm (4.6-4.7 mm).

4) A cylinder or vertical-walled bowl (13%) with a rounded lip and a 23 cm diameter (17-30 cm). The wall thickness is 4.6 mm (4-5.5 mm).

5) A cup with flaring walls (2%), a rounded lip, and a wall thickness of 5.1 mm.

6) A general bowl form (1%) with a wall thickness of 6 mm (5-7 mm).

**Type:variety Designation:** All of the sherds belong to newly-created types that were preliminarily placed in the Volcanic Grey Fine Ware by Monterroso (2006:31):

Chachab' Grey:Chachab'—122 sherds

Sechaj Incised:Sechaj—42 sherds (figure 7-16)

Patux Fluted:Patux—1 sherd

**Decoration:**

1) *Plain:* Undecorated sherds cover all of the forms present in the group.



2) *Incised*: Simple linear incisions were made on the exterior of several cylinders, flaring-walled cups, and general cup forms.

3) *Fluted*: An unknown form with a fluted exterior.

***Interregional comparisons***: This group is a local imitation of Chablekal Fine Grey (see above). Forsyth (1983:113-6) identified a local variant of Fine Grey wares at Edzna which he called Moxa Grey. Local imitations were also identified by Foias (1996:59) in the Altar de Sacrificios collection. She also noted the transmission of Fine Grey modes at El Mirador, Seibal, and the Petexbatun (Ibid.:593).

All of these sherds are a local adaptation of general Chablekal Group modes with the addition of fluting, which is not generally present in this group. A cylinder at Tonina was classified as Cholul Fluted (Becquelin and Baudez 1984:264) and placed into the Chablekal group. However, similar decoration is found in Fine Orange wares at a slightly later date.

***Intraregional comparisons***: This group appears at Hun Nal Ye, La Lima, and La Caoba Vieja.

### ***Cahabon Flakey Ware***

*Gladiola Group* (2% of the Late Classic sample)

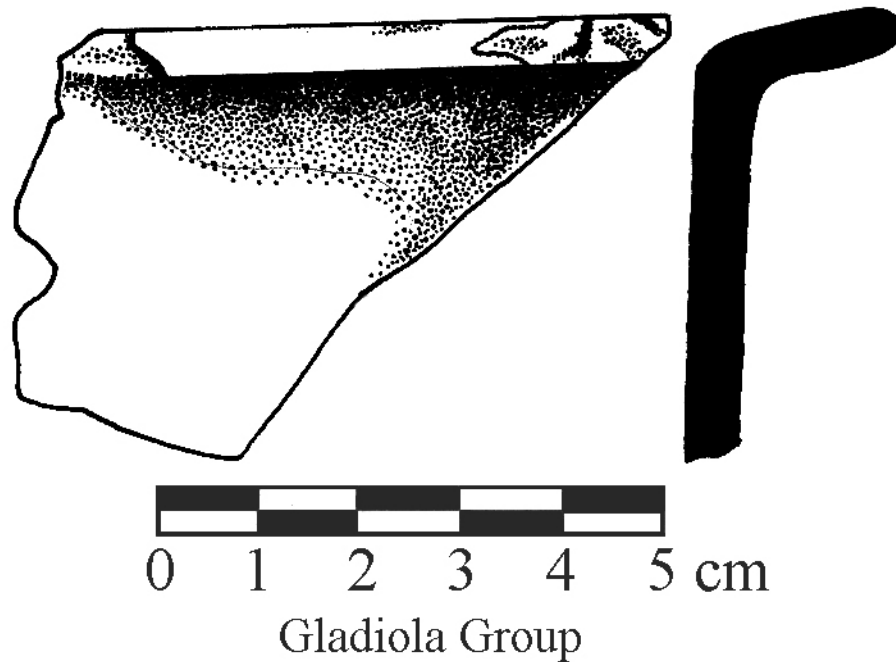
***Ware***: Cahabon Flakey

***Complex***: Coban 2 (Late Classic)

***Sample***: 123 sherds (probably only belonging to a few vessels). 12 were subjected to a more detailed analysis.

**Principal identifying modes:** 1) A bowl or jar with 2) a dull red slip and 3) a red or orange volcanic paste.

**Paste:** The paste is most commonly an orangish red (10R4/8 or 5/6) but is sometimes a reddish orange (2.5YR4/6 and 5/6). It most commonly has medium volcanic ash (67%) temper, but it is occasionally fine sand (22%) or a fine calcite and volcanic ash (11%) mix. The sherds normally (77%) have ferruginous inclusions; occasionally a dark nucleus is present as well (20% of the sample).



**Figure 7- 17: Gladiola Group, Gladiola Red:Gladiola**

**Surface treatment:** The surface of the vessel is painted a dark red (10R4/4 and 5/6) or reddish orange (2.5YR4/6). The slip is fragile and extremely dull. Fire-clouding is present in 10% of the sample.

**Forms:**

- 1) A general jar form (58%) with a wall thickness of 7.8 mm (6.5-8.9 mm).

2) A general bowl form (27%) with a rounded lip and a 45 cm diameter. The wall thickness is 6.9 mm (5.3-8 mm).

3) A bowl with sloping walls (10%) and a medial flange 2.8 cm below the rounded rim. The vessel has a ring base and a 38 cm diameter. The wall thickness is 7.8 mm (7.1-8.2 mm).

4) A bowl with flaring walls (5%), a rounded lip, and a 21 cm diameter (17-23 cm). The wall thickness is 9.4 mm (8.2-10.5 mm).

5) A cup with sloping walls (1%) and a flat base. The lip is rounded, and the diameter is 14 cm. The wall thickness is 4 mm.

**Type:variety Designation:** These types are similar and might represent subtle differences best expressed on the varietal level:

Gladiola Red:Gladiola (Arnauld 1986:342)—109 sherds (figure 7-17)

Mostaza Red-on-Natural (Arnauld 1986:324)—14 sherds

**Decoration:** Both types in this group are undecorated.

**Interregional comparisons:** For a general description of red-slipped vessels in the Late Classic, see the description for Tinaja Red:Tinaja above. The Verapaz samples are distinct from the lowland wares in almost all aspects—the paste, temper, form, and surface treatment is rougher and less glossy.

Red-slipped types are common throughout the highlands, although they share the same problems as brown- and orange-slipped types (see description for Chichicaste below)—there are multiple types or wares at the same site and multiple methods of classification, depending on the site and the ceramicist. At Nebaj (Becquelin *et al.* 2001), 15 red types were identified in the Late Classic alone. At Los Cerritos Chijoj (Ichon

1992:158-67), the Pasaquil group covers all of the red-slipped vessels and has 4 different types—2 decorated ones and 2 plain types that are distinguished by form (one consists only of very open bowls, while the other has large open bowls, jars, plates, and comales). The red sometimes leans towards orange, is thick, and often has mica present on the surface. Chixoy Rough ware from Los Encuentros (Ichon and Hatch 1980:138) is very similar, and Ichon compares it to Mostaza Red-on-Natural (see below) in the present classificatory system.

For a general description of red-slipped vessels in the Late Classic, see the description for Tinaja above. The Verapaz samples are distinct from the lowland wares in almost all aspects—the paste, temper, form; surface treatment is rougher and less glossy.

***Intraregional comparisons:*** This group only appears in the southern half of the region, in Hun Nal Ye and the Candelaria system.

*Chichicaste Group* (10% of the Late Classic sample)

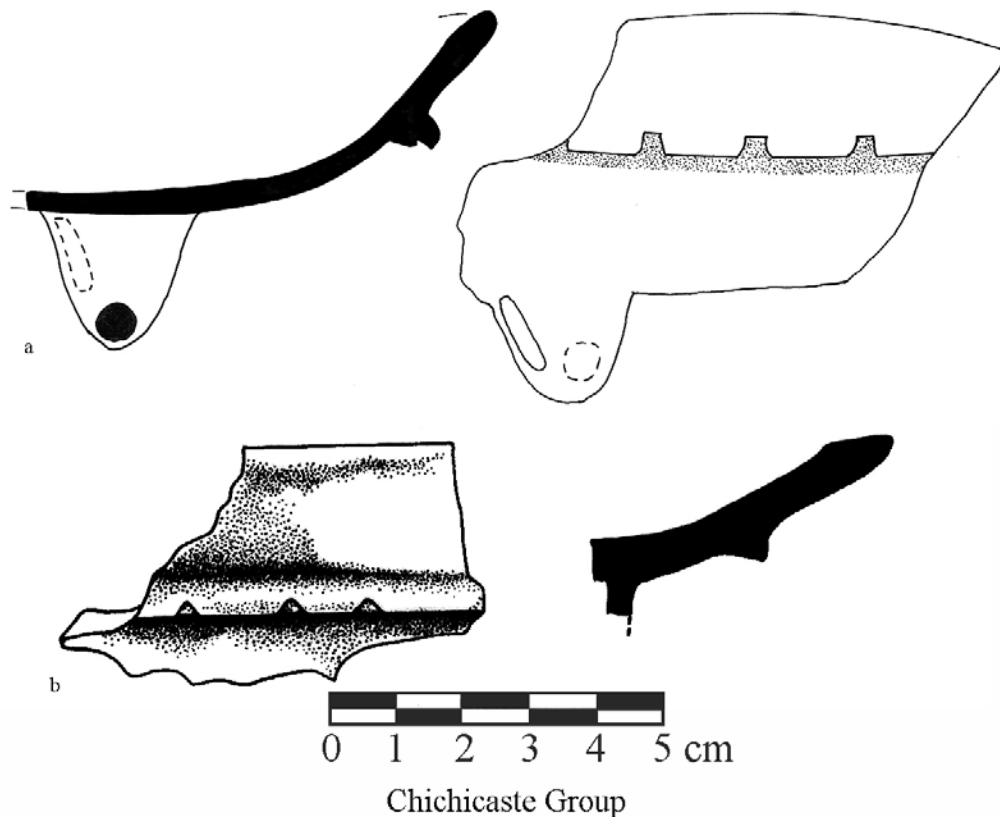
***Ware:*** Cahabon Flakey

***Complex:*** Coban

***Sample:*** 506 sherds and 2 whole vessels. 204 were subjected to a more detailed analysis. The sample includes 145 body sherds, 111 rims, 95 rim-to-base sherds, 71 bases, and 60 special bodies.

***Principal identifying modes:*** 1) A bowl, jar, or cylinder with 2) a brown or tan slip; 3) a smudged interior; and 4) red or orange paste of variable color with sand or volcanic temper.

**Paste:** The paste is highly variable in color, from dark red (7.5R5/8) to yellowish cream (10YR7/6), and the color often varies on the same sherd. The most common colors are orangish red (10R5/6 and 6/6) or orangish red (2.5YR5/4 and 5/6). The paste most commonly has a fine (49%) or medium (19%) sand or fine volcanic ash (27%) temper, although it occasionally has fine quartz (1%), fine calcite (1%), or, even more rarely, medium ash, medium quartz, organic elements and sand, or sand and ash temper. There are often inclusions—pebbles (16%), red (3%) or black (7%) ferruginous lumps, charcoal, or pumice (3%). Occasionally (46%) there is a dark nucleus, which is most often thick.



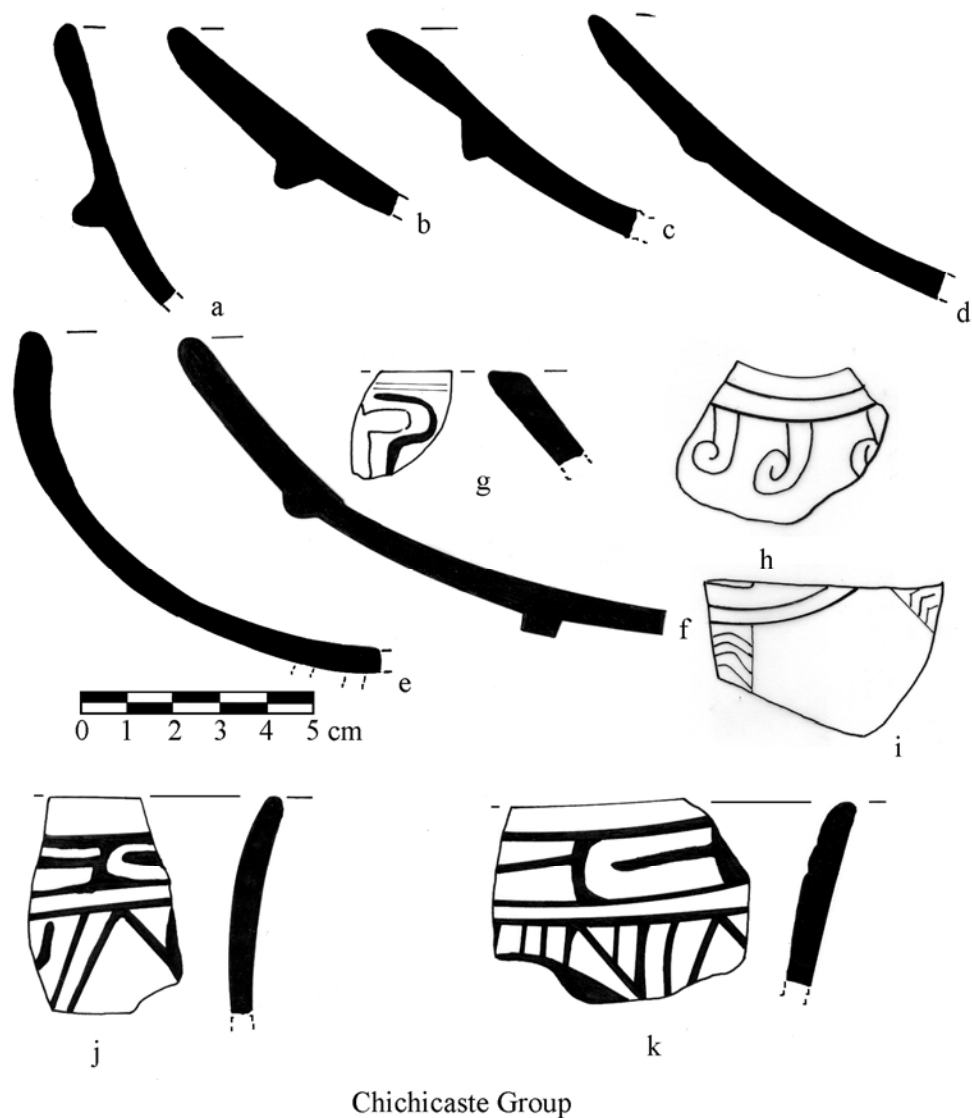
**Figure 7- 18: Chichicaste Group, a) Chichicaste Brown:Chichicaste, b) Chichicaste Brown:ND/Smudged Interior**

**Surface treatment:** A brown or brownish slip was applied directly over the pre-cooked vessel. The color is variable, from reddish (10R5/6) to yellowish (7.5YR4/2 to 8/2), although it is most commonly orangish (5YR3/1 and 4/1). Unlike standard Late Classic lowland types, the slip is extremely fragile and easily eroded over the passage of time. Special care is needed to wash the sherds, as any surviving slip is easily rubbed off. Most of the sherds were of indeterminate slip placement (32%); those with remaining slip were slipped on both sides (21%), although occasionally the sherds are only slipped on the interior (14%) or exterior (4%). Occasionally there is evidence of zoned slip on the interior and exterior above a medial flange (13%). Both slipped and unslipped bases are present (less than 1%).

**Forms:** 15% of the sample is of indeterminate form

1) A bowl with a recto-divergant rim and a mid-sized medial flange (27%) that is only occasionally modified by crude incisions separating it into different segments. The vessel has a rounded (64%) rim or an interior (32%) or exterior (4%) bevel and a diameter of 25.1 cm (16-40 cm). The distance from the lip to the ridge is 3 cm (2-4.7 cm). The vessel is often supported by a ring (87%) or pedestal (13%) base (.4-.7 cm, with an average of .6 cm) or occasionally by ovoid feet (5%). The partial vessel stands 5.5 cm tall, 2.8 cm of which is the ovoid support. The wall thickness is 6.3 mm (4-10.2 mm).

2) A general bowl form (21%), normally with a rounded or interior-beveled lip, a curved rim, and a coke-bottle or ring base. The one extant diameter is 19 cm; the wall thickness is 6 mm (3.8-11.7 mm).



**Figure 7- 19: Chichaste Group, a-f) Chichicaste Brown:Chichicaste; g, j-k) Nimha Gouged-  
Incised:Nimha; h, i) Kaleb'aal Incised:Kaleb'aal**

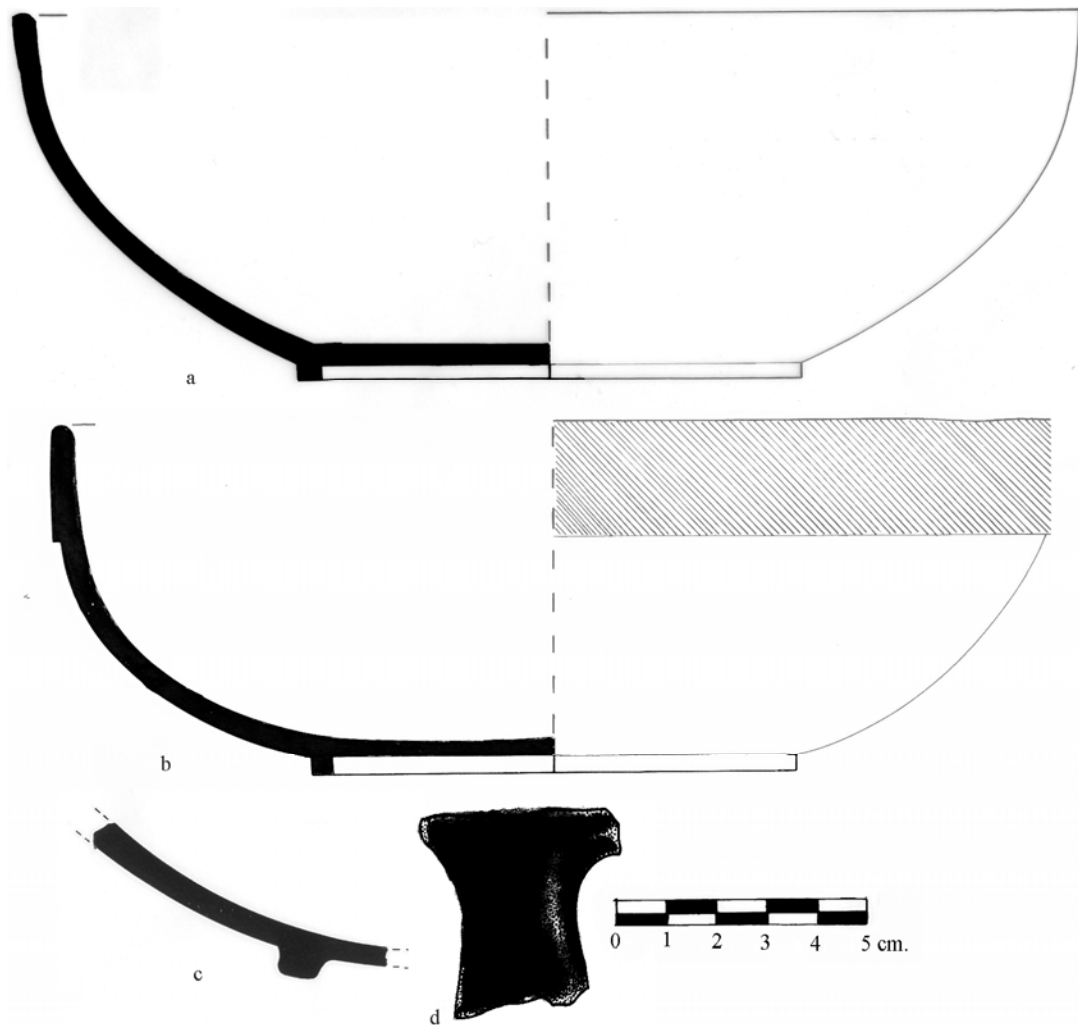
3) A general cup form (18%) with a rounded (59%), squared (31%), interior beveled (6%), or squared and fluted (3%) lip and either a flat (95%) or rounded (5%) base. The diameter is 11.9 cm (8-17 cm), and the wall thickness is 5.1 mm (3-11 mm).

4) A straight-walled bowl with a medial flange (9%) that ranges from small to large. The lip has an interior bevel and a diameter of 20 cm (6.2-26) cm. The distance

between the lip and the flange is 2.9 cm (2.4-.4 cm). The wall thickness is 5.8 mm (4.7-6.7 mm), and one vessel stands 6.6 cm tall.

5) A cylinder (5%) with a rounded lip, a direct rim, and a flat base. This form has a diameter of 16 cm (12-24 cm) and a height of 12.4 cm (11.8-13 cm). The wall thickness is 4.4 mm (3-6 mm).

6) A small “Z”-angled bowl (3%) with a rounded lip, a ring or pedestal base, and a 16.3 cm (9-22 cm) diameter. The wall thickness is 5.3 mm (3-7 mm).



Chichicaste Group

Figure 7- 20: Chichicaste Group, a-d) Chichicaste Brown:Chichicaste



7) A sloping bowl (1%) with a rounded or interior beveled rim and a diameter of 25 cm (21-28 cm). The wall thickness is 6.2 mm (5.9-6.9 mm).

8) A jar form with a very restricted neck (less than 1%) with a wall thickness of 8.2 mm (6.6-9.8 mm) and a rounded lip. The diameter is 4 cm, and there is evidence of a loop handle attached to the base of the neck.

9) A bowl with a slightly restricted, outflaring neck (less than 1%). The lips are everted and rounded. The neck height is 3.6 cm, the diameter is 12.5 cm (12.3-12.7 cm), and the vessel height is 13.5 cm (13.4-13.5 cm)

**Type:variety Designation:** Chichicaste Brown Black was established as as a broad-ranging type with many different kinds of decoration by Arnauld (1986:337), but for the purpose of the present study it has been divided into different types and varieties according to surface decoration. Since none of the sample here or reported by Arnauld approaches black, the nomenclature has been changed.

Chichicaste Brown:Chichicaste—190 sherds ( figure 7-18 a, 7-19 a-f, 7-20 d) and 3 whole vessels (figure 7-20 a-c)

Chichicaste Brown:ND/smudged interior—290 sherds (figure 7-18 b)

Kaleb'aal Incised:Kaleb'aal—8 sherds (figure 7-19 h-i)

Ch'och' Stamped:Ch'och'—6 sherds

Nimha Gouged-Incised:Nimha—4 sherds (figure 7-19 g, j-k)

Hix Fluted:Hix—2 whole vessels

Q'eqibaq Appliqué:Q'eqibaq—7 sherds from one vessel

“Potential Brown” (Arnauld 1986:357-8)—1 sherd

***Decoration:***

1) *Plain:* Undecorated sherds span the majority of forms.

2) *Smudged:* Smudged sherds span the majority of forms. Smudged interiors are the norm with other types of decoration.

3) *Incised:* Bowls or cups are occasionally decorated with simple geometric patterns composed of post-firing incisions. 75% of the sample has a smudged interior.

4) *Gouged-incised:* Bowls are at times decorated with complex geometric designs decorating their exterior and are created by gouging and incising the vessel after firing. Half of the sample is smudged in the interior.

5) *Appliqué:* One bowl had this type of decoration. Before slipping the vessel, the exterior was decorated with simple “buttons” or “pills.” The interior is smudged black.

6) *Impressed:* Stamped circular reed impressions on bowls.

7) *Fluting:* The exterior of two deep bowls had wide horizontal fluting below the neck, and the exterior of the vessel was slipped a polished brown with some evidence of fire-clouding. The interior was smudged black.

***Interregional comparisons:*** Brown-slipped wares are extremely wide-ranging throughout much of the highlands, although, due to differences in classification, a few related types have been identified in a multitude of ways. In Alta Verapaz (Arnauld 1986:337-40) they appear as the following: annular or ring-based bowls standing between 5 and 10 cm tall with a diameter of between 14 and 24 cm, cylindrical or slightly out-sloping cups with a 12-20 cm diameter, medial-flanged tripod bowls standing 7 cm (without the supports) with a 18-19 cm diameter, Z-angled ring-based bowls standing 6.9

cm with a 14-22 cm diameter, and several general bowl forms. The slip varies from cream to dark brown, sometimes with orangish, reddish, or greyish tones. In the Early Classic, medial-flanged bowls are common, as are bowls with horizontally-everted lips and a bichrome with a red lip.

Ichon (1992:189-90) found examples from this group in Los Cerritos Chijoj (see description for Kaleb'aal Incised below). Buff and Brown Monochromes, almost certainly belonging to this type, were found at Chipoc (R.E. Smith 1952), and at Nebaj, Becquelin *et al.* identified Xebitz Beige (2001:257). At Kaminajuyu, two related wares are found, Early Classic Esperanza Flesh (Hatch 1997:156-9, Weatherington 1978:87) and Late Classic Amatle Ware (Hatch 1997:171, Weatherington 1978:89; called Tejar Ware by Kidder *et al.* 1946:41). Amatle has also been found as a probable import in La Lagunita (Ichon and Arnauld 1985:158). The forms for Amatle and Esperanza are cylinders (with tripod feet in the Early Classic), jars, deep dishes, and curve bowls with a ring base. Zacualpa's Tea Ware is identical to Esperanza Flesh at Kaminaljuyu (Wachope 1975:114, Hatch 1997:156), and Melachrino Brown is the equivalent at Copan (R. Viel 1983:28-9). The most common vessel shape is a hemispherical bowl, although the earlier specimens are flaring with a 16 cm diameter. Amatle has also been found at other sites in the Valley of Guatemala, Sacatepequez, Chimaltenango, and the south coast (Hatch 1997:171). Two other brown-black wares were found at Kaminaljuyu, Unidentified and Berlin (Ibid. 167-9), which are mostly differentiated by their darker slip. At Chalchuapa, the related type is called Chiquihuat (Sharer 1978:47-8).

Cusula Brown-Black (Ichon 1992:175-80), identified at Los Cerritos Chijoj, is nearly identical to Chichicaste, except for the following identified by Ichon—the slightly

higher degree of polishing on the surface, the addition of a globular bowl and a small jar to the form repertoire, and the lack of bichromes.

Several black-brown wares were identified by Ichon and Hatch (1980:142, 144) at the site of Los Encuentros, including Brown-Black Polished (see discussion for Boxcay Brown in the Preclassic chapter), a predominately Preclassic type that continues into the Early Classic. Both bowls and jars are common. In the mid-Motagua Valley, the Early Classic Cantoral Ware (Romero *et al.* 2006:28-9) is probably part of the Early Classic variant of this group, a tan- or brown-slipped round bowl with an annular base and a red lip.

Brown-slipped incised sherds are present in the northern highlands throughout the region under study by Arnauld (1986:337-9) and Los Cerritos Chijoj (Ichon 1992:189-90), where parts of two different cylinder vessels belonging to this type were found in a Terminal Classic context. Hatch (1997:171) notes that incising on Amatle Ware is rare but present. Melano Carved is a broad-incised type at Copan (R. Viel 1983:26-8) that appears to be closely-related with geometric, glyphic, or pseudoglyphic decoration.

Gouged-Incised ceramics are rare in the highlands during the Classic. Melano Carved at Copan does occasionally near gouged-incised decoration. Fluting is a decorative mode for Chichicaste Brown-Black in Alta Verapaz (Arnauld 1986:337-40), as is interior smudging. Hatch (1997:171) noted reed impressions on Amatle Ware examples in Kaminaljuyu. “Pill” appliqués identical to those found in the present sample were present in Alta Verapaz (Arnauld 1986:337-40), both with and without incisions in Alta Verapaz.

In the Preclassic and Early Classic, the Brown-Black Polished ware present through much of the highlands and Pacific slope (Ichon and Hatch 1980:125-7) occasionally has similar pill appliqués.

***Intraregional comparisons:*** This group only appears in the southern half of the region, in Hun Nal Ye, La Lima, and a few caves near La Lima in the Candelaria system. The only exception to this is the Potential Brown sherd, which was found in a cave in the San Francisco Hills.

***Observation:*** Both of the Hix Fluted vessels were highly standardized and are nearly identical. The “Potential Brown” sherd could be just a variant of Chichicaste Brown:Chichicaste, but since I had the same doubts in placement that Arnauld did, I kept her original nomenclature from the Verapaz survey.

*Culantro Group* (less than 1% of the Late Classic sample)

***Ware:*** Cahabon Flakey

***Complex:*** Coban 2

***Sample:*** 3 rims, 1 body, and 1 special body sherds. 3 were subjected to a more detailed analysis.

***Principal identifying modes:*** 1) A bowl with 2) a fragile, dull orange slip and 3) an orange paste with quartz or sand temper.

***Paste:*** The paste is a light orange (5YR6/8) with medium quartz (33%) or fine sand (67%) temper. One example has pumice inclusions, and 67% of the sample has a dark nucleus in the exterior portion of the sherd.

**Slip:** The slip is a very dull and fragile dark orange. One sherd was only slipped on the interior; the others were slipped on both sides.

**Form:**

1) A round, slightly incurving bowl with a rounded lip, a ring base, and a 20 cm diameter. The wall thickness is 5.9 mm (5.4-6.4 mm).

2) A general bowl form with a diameter of 17 cm. The wall thickness is 8.8 mm.

**Type:variety Designation:** All of these sherds belong to the same type and variety:

Culantro Orange:Culantro (Arnauld 1986:342)

**Decoration:** These sherds are all undecorated

**Interregional comparisons:** Orange-slipped ceramics in the highlands are subject to the same problems in regional variation and non-standardized classification that are rife in the brown and red-slipped types (see Chichicaste Brown-Black and Gladiola Red above). Six different orange-slipped types were identified by Arnauld (1986) in Alta Verapaz with only subtle differences among them (she proposed that 2 of the types be combined with Gladiola Red). Only one type, Coralillo Orange Matte (Ibid. 343), is present in the Early Classic sample, although it continues into Coban 2 where the other types appear. At Los Cerritos Chijoj, Papur Group ceramics (Ichon 1982:180-3, see below) are present in the Terminal Classic sample. Hatch mentioned the presence of several orange-slipped wares at Los Encuentros (Hatch 1980:146).

**Intraregional comparisons:** These sherds were found in Hun Nal Ye and a cave associated with Raxruha Viejo.

*Coralillo Group* (less than 1% of the Late Classic sample)

**Ware:** Cahabon Flakey

**Complex:** Coban 2

**Sample:** 24 sherds, 3 of which were subjected to a more detailed analysis.

**Principal identifying modes:** 1) Matte orange slip with 2) tan paste with sand temper.

**Thickness:** 4.7 mm (4-6 mm)

**Paste:** The paste is a light tan (2.5YR5/8 and 6/6) or yellowish tan (5YR7/3) with fine ash or medium sand temper. There are often ferruginous inclusions, and one example has a thick dark nucleus.

**Slip:** The slip is a matte orange (2.5YR5/6 and 5/8). One sherd has an indeterminate slip placement; the others are slipped on both sides.

**Form:**

1) A cylinder (96%) with round (50%) or squared (50%) lips and a flat base. The diameter is 13.5 cm (13-14 cm). The wall thickness is 4 mm.

2) A general plate form with a flat base and a 2.7 cm hollow foot. The wall thickness is 5 mm (4-6 mm).

**Type:variety Designation:** These sherds all belong to the same type:

Coralillo Orange:Coralillo (Arnauld 1986:343)

**Decoration:** These sherds are undecorated.

**Interregional comparisons:** This type was identified in Alta Verapaz by Arnauld (1986:352). For a general discussion of Late Classic orange-slipped sherds, see the description for Culantro Orange above.

**Intraregional comparisons:** The vessels were all recovered from Hun Nal Ye.

*Mozote Group* (1% of the Late Classic sample)

**Ware:** Cahabon Flakey

**Complex:** Coban 2

**Sample:** 56 sherds and 2 partial vessels, of which 23 were subjected to a more detailed analysis. The sample consists of 38 bodies, 12 special bodies, 4 rims, 3 bases, and 1 rim-to-base sherd.

**Principal identifying modes:** 1) A bowl, jar, or cylinder with a red or orange volcanic paste and 3) a heavily erodeable cream or grey slip.

**Paste:** The color ranges from light red (10R5/6 to 7/8) to light orange (5YR6/8) but is most commonly a reddish orange (2.5YR5/6 to 7/8). The temper is normally a fine volcanic ash (81%), but it is occasionally medium ash (5%) or fine (5%) or medium (9%) sand. There are inclusions in 43% of the sample, which are normally ferruginous (23%), but mica (5%), quartz (5%), and pumice (5%) are also present. There is a dark nucleus present in 24% of the sample.

**Slip:** The cream slip is variable in color (5YR6/1 to 10YR7/1) and tends to be mostly eroded, leaving just a faint dusting of cream over the bright red or orange paste. The slip is normally on both sides (79%) but is occasionally on only the exterior (12%) or interior (2%). 7% of the sample has unknown slip placement.

**Forms:**

1) A bowl with sloping walls (22%), a flat base, and a squared (11%), pointed (67%), or interior beveled (22%) lip. The diameter is 26 cm; the wall thickness is 6.9 mm (5.9-7.5 mm).



- 2) A bowl with flaring walls (11%), an interior beveled lip, and a 29 cm diameter. The wall thickness is normally 6.4 mm (6.3-6.4 mm).
- 3) A round bowl (3%) with a wall thickness of 6.7 mm.
- 4) A small, sharp Z-angled bowl (5%) with a wall thickness of 7.3 mm.
- 5) A general bowl form (16%) with a wall thickness of 5.6 mm (4.3-6.6 mm).
- 6) A jar (41%) with a 16 cm diameter and a rounded lip. The wall thickness is 7 mm (5.6-8.1 mm).
- 7) A cylinder (3%) with an interior beveled lip and a 23 cm diameter. The wall thickness is 5.2 mm (4-6.4 mm).

**Type:variety Designation:** All of the sherds correspond to the same type:

Mozote Cream:Mozote (Arnauld 1986:347)

**Decoration:** Hun Nal Ye, La Caoba Vieja, and Tres Islas

**Interregional comparisons:** In addition to being identified in Alta Verapaz (Arnauld 1986:346), one rim classified as Mozote Cream was identified at Los Cerritos Chijoj (Ichon 1992:190). Cream-slipped vessels are rare during the Late Classic but do appear at Copan, where they are classified as Capulin Cream (Willey et al. 1994:36-7). The type consists of a similar, heavy cream slip that is burnished or polished and is either a bowl or cylindrical jar form.

**Intraregional comparisons:** The sample and distribution of this type is too small to make comparisons.

**Observation:** The slip is thinner and more easily eroded than Raxruha Cream.

*Chucho Group* (less than 1% of the Late Classic sample)

**Ware:** Cahabon Flakey

**Complex:** Coban 2 (Late Classic)

**Sample:** 2 body sherds, both of which were subjected to a more detailed analysis.

**Principal identifying modes:** 1) Grey slip with 2) simple incisions and 3) a tan, volcanic paste.

**Paste:** The paste is tan (2.5 YR5/6 or 5YR5/6) with fine sand temper.

**Slip:** A fragile, thin grey slip (5YR7/1 or 7.5YR7/2).

**Form:** Unknown form with a wall thickness of 4 mm.

**Type:variety Designation:** Both sherds belong to the same type:

Chucho Incised:Chucho (Arnauld 1986:351), originally established in Alta Verapaz as Chucho Grey Incised; the nomenclature was changed to the standard form in this study.

**Decoration:** The incisions are simple and on the exterior of the vessel.

**Interregional comparisons:** This type has been identified in Alta Verapaz (Arnauld 198:351) and Los Cerritos Chijoj (Ichon 1992:190-3) and is normally (in the case of the former) or exclusively (in the case of the latter) a cylinder vessel. For a discussion of grey and cream-slipped incised vessels, see the description for Nitro Incised above.

**Intraregional comparisons:** Both of the sherds come from Hun Nal Ye.

*Clavel Group* (1% of the Late Classic sample)

**Ware:** Cahabon Flakey

**Complex:** Coban 2 (Late Classic)

**Sample:** 63 sherds. 6 were subjected to a more detailed analysis.

**Principal identifying modes:** 1) A bowl or cup with 2) a fragile orange slip over a cream underslip; 3) reddish, volcanic paste.

**Paste:** The paste is red (10R5/6) or, more commonly, reddish orange (2.5YR4/3 to 6/8) with a fine volcanic ash temper. There are normally pebble (81%) or ferruginous (14%) inclusions.

**Slip:** A fragile orange slip (2.5YR6/8, 7/4 or 8/4) was applied onto a thin cream underslip. While 2 sherds are only slipped on both the interior and exterior, the majority are slipped on the interior only.

**Form:**

1) A general bowl form (98%) with a wall thickness of 8.3 mm (6.7-9.8 mm).

2) A general cup form with a rounded lip and a 15 cm diameter. The wall thickness is 6 mm.

**Type:variety Designation:** All of the sherds belong to the same type:

Clavel Orange-on-Cream:Clavel (Arnauld 1986:355)

**Decoration:** The sherds are undecorated.

**Intraregional comparisons:** The sherds are from Hun Nal Ye and a cave in the Candelaria system.

**Interregional comparisons:** This type has been identified in Alta Verapaz (Arnauld 198:355) and Los Cerritos Chijoj (Ichon 1992:190), although it is extremely rare (2 sherds).

A similar ware was identified at Los Encuentros, Orange-on-Cream (Ichon and Hatch 1980:144), a rectilinear bowl with basal molding and a slightly convex base. The

paste is fine and cream-colored; a cream underslip was placed on the exterior and occasionally the interior. The orange primary slip is only found on the exterior.

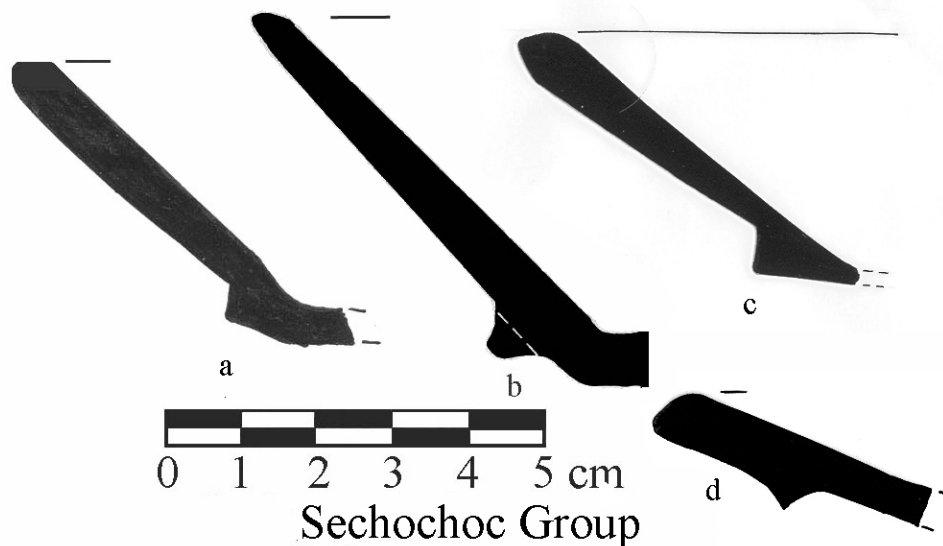
*Sechochoc Group* (less than 1% of the Late Classic sample)

**Ware:** Cahabon Flakey

**Complex:** Jolom

**Sample:** 11 sherds. 10 were subjected to a more detailed analysis. The sample includes 4 bodies, 4 special bodies, and 3 rims.

**Principal identifying modes:** 1) A plate or bowl with 2) an uneven black slip and 3) a red or orange volcanic paste.



**Figure 7- 21: Sechochoc Group, a-d) Sechochoc Black:Sechochoc**

**Paste:** The paste is normally a dark to orangish red (10R4/4 to 7/4), but one example is a reddish orange (2.5YR6/6). The temper is most commonly fine volcanic ash (50%), but medium volcanic ash (20%) or quartz (10%) and fine sand (20%) are present in the sample as well. There are occasionally pumice, mica, or pebble inclusions. Half of the sample has a dark nucleus, which is thick in all but one sherd.

**Slip:** The slip is similar to that of Balanza Black:Balanza—a variable black that fades into reds or browns—but it has a more smudged appearance. Both the interior and exterior are commonly entirely slipped (45%), although sometimes the slip is limited to the interior is slipped and the exterior between the rim and the basal flange (27%). 18% of the sample is slipped only on the exterior and the final 9% is slipped on the interior.

**Forms:**

1) A tripod plate with sloping walls (60%), an interior bevel on the rim, and a 24 cm diameter (23-32 cm). The wall thickness is 7.1 mm (6.4-7.5 mm).

2) A plate with flaring walls (10%) and a wall thickness of 6.7 mm.

3) A plate with a slight basal flange located 1.9 cm below the interior beveled lip, a 31 cm diameter, and a 3.9 cm diameter (30%). The wall thickness is 8.6 cm.

**Type:variety Designation:** The sherds all belong to the same type:

Sechochoc Black:Sechochoc (Woodfill and Monterroso [2005:3], figure 7-21 *a-d*)

**Decoration:** These sherds are undecorated.

**Interregional comparisons:** This type is an imitation of Infierno Black:Infierno made with northern highland technology. Blacks are non-existent in the Verapaz until the Postclassic (although black-smudged interiors are common, and black secondary slips are present on bichromes, trichromes, and polychromes). There are some examples, however, from throughout the Classic found at sites further south, at Kaminaljuyu (Wetherington 1978:67) and Nebaj (A.L. Smith and Kidder 1951:71, Becquelin *et al.* 2001:253-4), which are discussed in the description for Javier Incised above. For a general description of Infierno Black and other black-slipped types in the Late Classic see above. This sample differs from Infierno in that the walls are thicker, the slip is rougher

and less even, and the paste is most commonly volcanic. The general impression is that these vessels were sturdier and less elegantly made.

***Intraregional comparisons:*** These sherds are from the Candelaria Caves, La Caoba Vieja, and Tres Islas.

***Batz Group*** (less than 1% of the Late Classic sample)

***Ware:*** Cahabon Flakey

***Complex:*** Coban 2

***Frequency:*** 3 sherds, all of which were subjected to a more detailed analysis.

***Principal identifying modes:*** 1) A cylinder with 2) appliquéd monkey faces below the rim and a cream slip and 3) a dark interior smudging; 4) orange paste with volcanic or sand temper.

***Thickness:*** 4 mm, 3-4 mm

***Paste:*** The paste is a reddish (2.5YR6/8) or light (7.5YR6/6) orange with either fine volcanic ash or fine or medium sand temper and either pebble or quartz inclusions. One example has a thin dark nucleus.

***Surface treatment:*** The exterior was painted in a light cream slip (5YR4/2) while the interior was smudged black or dark grey.

***Forms:***

1) A bowl with flaring walls (50%) and an interior bevel on the rim. The wall thickness is 4 mm.

2) A barrel with a slight bulging in the walls (50%), a slightly incurving rim with a pointed lip, and a 15 cm diameter. The wall thickness is 4 mm (3-5 mm).

**Type:variety Designation:** These sherds all belong to the same type:

Batz Modeled:Batz (first identified by R.E. Smith [1952:224, fig. 2] as a “Monkey-Face Frieze” vessel at Chipoc. Type designation is established here.)

**Decoration:** Underneath the rim is a row of appliquéd monkey faces.

**Interregional comparisons:** This type is present in the area around Chipoc (R.E. Smith 1952) and appears to be identical to the present sample. A strongly related type, Max Modeled (see below) is found between Hun Nal Ye and Cancuen and at Salinas de los Nueve Cerros. The paste is similar with mostly fine ash temper, but quartz, red ferruginous lumps, and air pockets (presumably from fired-off organic inclusions) are all present in part of the sample. Although both sport monkey faces, the decoration is often more complex, with numerous larger monkey faces (with hollow, rattling bellies) below the rim and whole monkeys with rattling stomachs appliquéd or modeled on the body. The form is restricted to incurving bowls, and the slip is a polished black. Wetherington (1978:89) noted the presence of appliquéd monkey heads on jar bodies and tall cylinders, which are also present on the south coast (Parsons 1969: Fig. 71a-d). A possible monkey head is found on Chablekal Group bowls at Cancuen (Bill *et al.* 2003) and Aguateca (Foias 1996:610-11).

**Intraregional comparisons:** This type is only present in the southern ½ of the region under study. Monkey heads have been found on a few vessels from Cancuen but are Terminal Classic Fine Grey (see ware description below). At La Lima, a similar type, Batz Modeled, is found, and is described below.

**Observation:** The monkey heads are much smaller than those found in Batz Modeled:Batz (see below) and are without the rattles in their mouths.

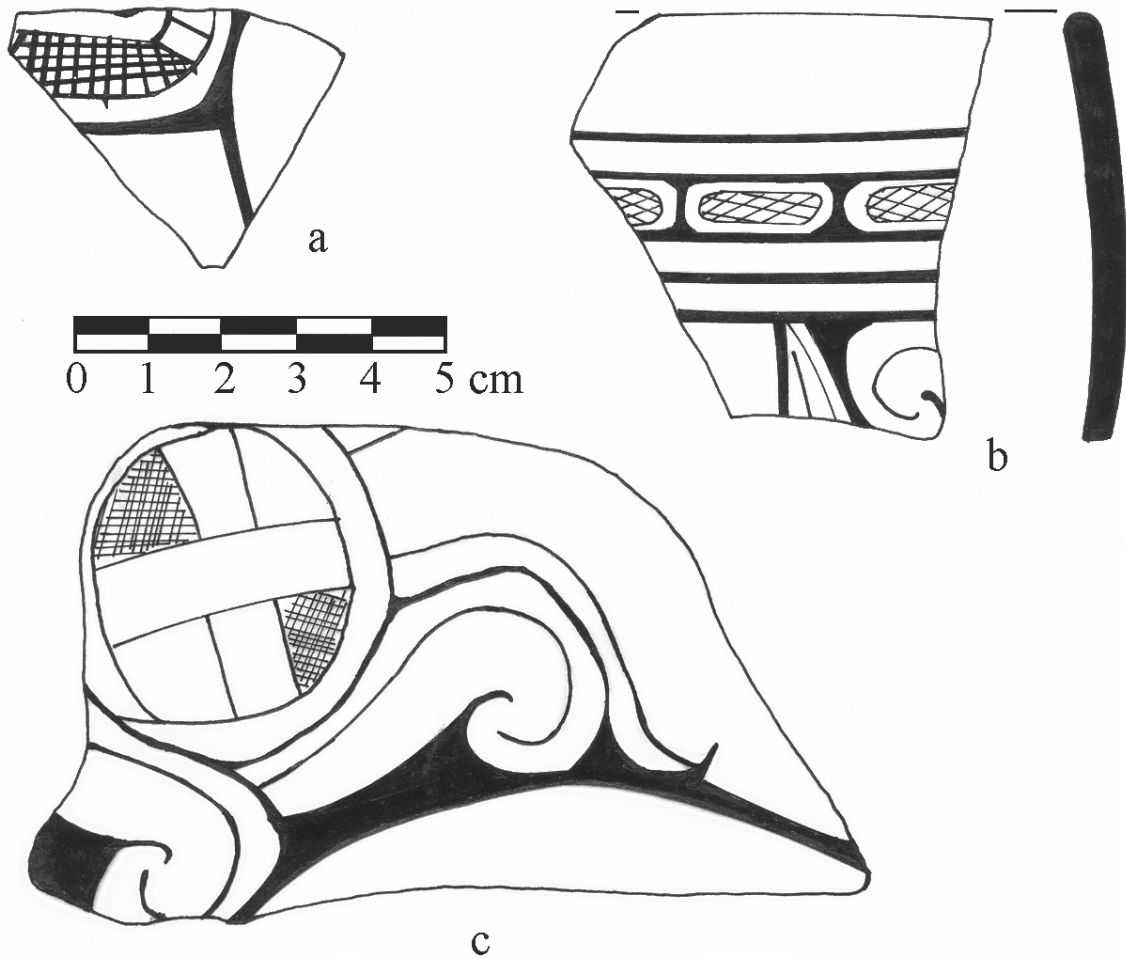
*Raxruha Group* (less than 1% of the Late Classic sample)

**Ware:** Cahabon Flakey

**Complex:** Jolom

**Sample:** 9 sherds, 7 of which were subjected to a more detailed analysis. The sample includes 6 rims, 2 appendices, and 1 body.

**Principal identifying modes:** 1) A pitcher with an open spout and 2) a highly burnished, thick, cream slip; 3) red paste with sand or calcite temper.



### Raxruha Group

Figure 7- 22: Raxruha Group, a-c) Laheb' Gouged-Incised:Laheb'



**Paste:** The color is a light red (10R4/6 to 7/6) with medium sand, fine volcanic ash, fine sand, or medium calcite temper. 3 sherds have inclusions—2 are ferruginous lumps (red and black) and 1 contains pieces of pumice.

**Slip:** A yellowish cream slip (5YR6/1 or 10YR7/2) is slathered onto the surface of the vessel and heavily polished, giving it a thick, almost Preclassic, waxy feel. Most of the sherds are slipped on only the exterior or on both sides; only 1 is slipped on the interior alone.

**Form:**

1) A pitcher with a 19 cm diameter (16-21 cm) and a rounded lip. One example has an open spout on the rim. The wall thickness is 6.5 mm (6.3-6.7 mm).

2) A cylinder with a rounded lip and a 13 cm diameter. The wall thickness is 6.4 mm.

3) A round bowl with a slightly incurving rim, a rounded lip, and a 22 cm diameter. The thickness is 4.3 mm (4.1-4.4 mm).

4) A jar with a 7.6 mm (6.3-8.8 mm) wall thickness.

**Type:variety Designation:** This group is somewhat problematic, as the base type (Raxruha) and the elaborated types (Nitro Incised and Laheb' Gouged-Incised) are only present together in one cave in the Candelaria system. Raxruha Cream is a diagnostic type for Cancuen, while Nitro Incised is common only in the northern highlands. Laheb' Gouged-Incised is a very rare type, with only one sherd identified by Arnauld (1986:373); only a few are in the present sample. The soft, thick, heavily-burnished slip is identical among the different types, however, so they were grouped together for the purposes of this present sample. Arnauld placed Nitro into the Mozote group (Arnauld

1986:347-8) based on slip color, but has sherds classified as Mozote Cream with fine incisions. It is possible, however, that the difference between the Mozote and Raxruha sherds is differential weathering.

Raxruha Cream:Raxruha (Bill 2001:183)—4 sherds

Nitro Incised:Nitro (Arnauld 1986:349)—this type was originally established as “Nitro White Incised” by in Alta Verapaz. The name was changed to comply with the standard naming format in this text. 2 sherds

Laheb’ Gouged-Incised:Laheb’ (established here)—3 sherds (figure 7-22 *a-c*)

***Decoration:***

- 1) *Plain*: All unslipped forms are pitchers.
- 2) *Incised*: The incised sherds have simple geometric patterns. The lip is slipped orange.
- 3) *Gouged-incised*: Complex geometric patterns and rows of pseudoglyphs are gouged and incised on the exterior of the vessel (a round bowl, a pitcher, and a cylinder). Only one sherd has a lip, which is slipped orange.

***Interregional comparisons:*** This type is only found in the local region and almost exclusively at Cancuen. In surface treatment it is nearly identical to Nitro Incised and Laheb’ Gouged-Incised, but both of those types appear to originate in Alta Verapaz and are only present south of Cancuen. For a general description of Late Classic cream-slipped types, see Mozote Cream above.

Nitro Incised has been found in Alta Verapaz (1986:349-50) and Los Cerritos Chijoj (Ichon 1992:190). There are many variations within the type—Ichon identifies 3 different varieties in a sample of only 26 sherds, and Arnauld, with a sample of 80 sherds,

identifies 3 different types of decoration. Only one variety is found in both of those samples—the presence of zoned black paint in non-incised areas, which is not found here. Ichon also separates the sample into polished white and matte white varieties. Arnauld found some red slip emphasizing the incisions and one example of a gouged band delineating the incised designs. The decorations are often complex, with either geometrical or anthropomorphic figures.

At Chipoc, this type is present in the sample of Cream on Mikado Brown Ware (R.E. Smith 1952, fig. 14-15), a ware that was imported into Uaxactun (R.E. Smith 1955:34). A related type appears to be present in Nebaj (Becquelin *et al.* 2001:259) as Cream Incised. The vessel is a flat-bottomed bowl with flaring walls and a 17.1 cm diameter. The incisions are on 2 panels, each with a seated person, and on columns of glyphs between them. At Copan, Champona Incised (Willey, Leventhal, *et al.* 1994:37-9) has deep geometrical incisions and carving, with pseudoglyphs and geometric designs on bowls.

Laheb' Gouged-Incised has only been found in the present region and in Alta Verapaz (Arnauld 1986:373, R.E. Smith 1952, fig. 15p and ee). The design is identical to that found on the round bowl; Arnauld thought there might have been an orange secondary slip. At Copan, Champona Incised (Willey, Leventhal, *et al.* 1994:37-9) sometimes is carved in addition to incised, which approaches the effect of the decoration on this type. A very similar design was also reported on Melano Carved examples by Willey, Leventhal, *et al.* (1994:107, fig. 25m), a circle divided into 4 sections, two of which are cross-hatched. Although brown-slipped, it is closely related to the present sample in decoration if not in form or surface color.

***Intraregional comparisons:*** All of the material was found in the Candelaria system in caves around La Lima with the exception of 1 undecorated sherd from Tres Islas.

***Xoy Glossy Ware***

*Jekcha Group* (less than 1% of the Late Classic sample)

***Ware:*** Xoy Glossy

***Complex:*** Salinas Late Classic

***Sample:*** 2 body sherds and 1 rim, 2 of which were subjected to a more detailed analysis.

***Principal identifying modes:*** 1) A jar with 2) a red slip and 3) a red paste with quartz temper.

***Thickness:*** 6.0

***Paste:*** The paste is an orangish red (2.5YR6/6) with medium quartz temper or light orange (5YR6/6) with fine sand temper and ferruginous inclusions.

***Slip:*** A streaky, cherry red slip (10R4/6) on the exterior of the vessel.

***Form:*** A jar similar to Tinaja Red:Tinaja, although the neck is much thicker and more uneven. There is less care given to its production, so the neck is uneven in profile. The wall thickness is 7 mm (6-8 mm).

***Type:variety Designation:*** Dillon (1979:90) established “Unnamed Red:Tucubanc” and “Unnamed Red:Jekcha” at Salinas de los Nueve Cerros. Since Jekcha was the largest variety of Red-slipped sherds in the Late Classic and variations were subtle, I used Jekcha as the Late Classic group name.

Jekcha Red:Tucubanc (Dillon 1979:90)

Bajos Impressed:Bajos (established here)

**Decoration:** 1) *Plain:* These sherds are undecorated body sherds

2) *Impressed:* The intent of the artisan was to create something similar in appearance to Pantano Impressed:Stamped, but the end product was unsuccessful. The slip is a dark red and the stamps are irregularly applied.

**Interregional comparisons:** For a general description of Late Classic red-slipped wares, see the description for Tinaja Red: Tinaja above.

**Intraregional comparisons:** The undecorated sherds are from Tres Islas; the impressed sherd was found in La Caoba Vieja.

**Observations:** The very distinct surface color and treatment is the only thing that allowed placement into this category, although this was done after comparing this sample with Dillon's collection.

Bajos Impressed is very distinct from Pantano Impressed—everything from the paste to the impressions are distinct, and the construction is so crude that it would be considered a “waster” if not for the other differences.

*Max Group* (less than 1% of the Late Classic sample)

**Ware:** Xoy Glossy

**Complex:** Salinas Late Classic

**Sample:** 1 rim sherd which was subjected to a more detailed analysis.

**Principal identifying modes:** 1) A deep bowl with 2) a tan slip, 3) interior smudging, and 4) a red paste with quartz temper.

**Paste:** The paste is a yellowish tan (7.5YR6/6) with fine ash temper and pebble inclusions. The interior half of the sherd profile was oxidized black.

**Slip:** A dark brown slip (7.5YR3/4) on the exterior of the vessel

**Form:** A barrel with a pointed lip and a 15 cm. diameter. The wall thickness is 6.1 mm.

**Type:variety Designation:** This material corresponds to a type from Salinas de los Nueve Cerros (originally established as a variety of unnamed Modeled):

Max Modeled:Max (Dillon 1979:203, figure 7-23)



**Figure 7- 23: Max Group, Max Modeled:Max**

**Decoration:** Below the vessel's mouth there is a row of large monkey faces with slightly open mouths showing off loose balls inside that rattle. The interior is smudged. Below the vessel's mouth there is a row of large monkey faces with slightly open mouths showing off loose balls inside that rattle.

**Interregional comparisons:** This type was originally identified at Salinas de los Nueve Cerros (Dillon 1979:203-4), where 2 complete vessels and 2 sherds were found. The slip in the Nueve Cerros examples was black, which contrasts with this sample, although in

all other respects the two samples are identical. For a complete discussion of monkey freizes, see the description for Max Modeled above.

***Intraregional comparisons:*** This sherd was found in La Lima.

***Observation:*** The very distinct surface color and treatment are the only things that allowed placement into this category, although this was done after comparing this sample with Dillon's collection.

### **Polychromes, Bichromes, and Trichromes**

#### ***Petén Glossy Ware***

*Saxche Group* (less than 1% of the Late Classic sample)

***Ware:*** Petén Glossy

***Complex:*** Tepeu 1

***Sample:*** 9 sherds. 8 were subjected to a more detailed analysis. The sample includes 7 rims, 1 body, and 1 special body sherd.

***Principal identifying modes:*** 1) A plate, often with 2) a simple, unmodified basal flange; 3) orange primary slip with designs done in red and black atop it.

***Paste:*** The paste varies from light pink (10R7/6) to light orange (5YR7/4 to 8/4) but is most commonly the latter. The temper is normally a fine quartz (80%), with one example each of medium calcite (10%) or quartz (10%). There are ferruginous inclusions in 70% of the sample. A dark nucleus is normally present in the profile of the sherd (60%).

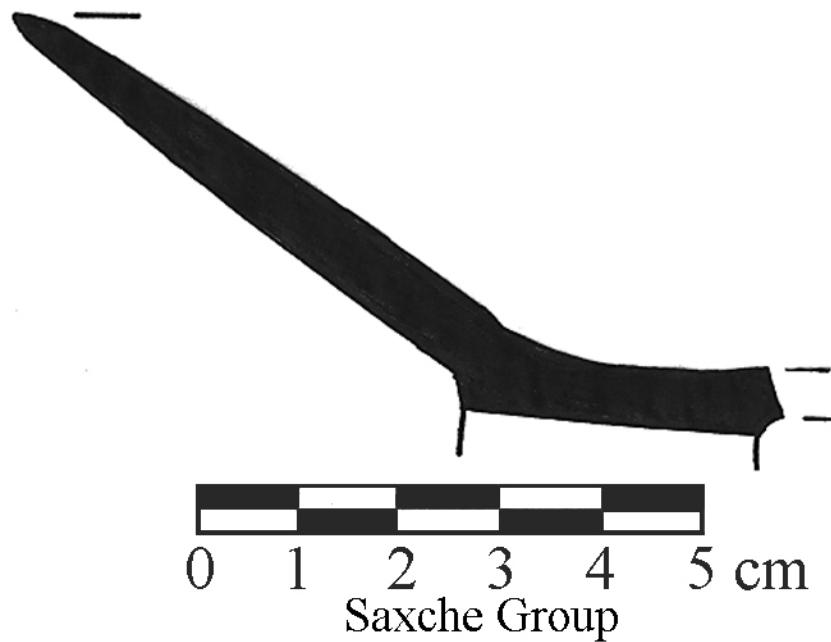
***Slip:*** The vessel was slipped reddish orange (5YR5/8), orangish red (2.5YR6/8), or yellowish orange (5YR5/8). 66% of the sample has a cream underslip. The slip is found

on both sides in 67% of the sample, on the interior alone (22%), or on the exterior alone (11%).

**Form:** A plate with sloping walls with a flat base in one example. The lip is rounded or with an interior bevel; the diameter is 23.6 (22-25 cm). The wall thickness is 6.7 mm (4.9-7.9 mm).

**Type:variety Designation:** Sherds in this group belong to two established groups:

Saxche Orange Polychrome:Saxche (R.E. Smith and Gifford 1966:162)—10 sherds (figure 7-24)



**Figure 7- 24: Saxche Group, Saxche Orange Polychrome:Saxche**  
Chantuori Black-on-Orange:Chantuori (R.E. Smith and Gifford 1966:156)—1

sherd **Decoration:**

1) *Bichrome*: Simple decorations in black on the exterior of the vessel.



2) *Polychrome*: Atop the primary slip, geometric designs (and one zoomorphic design) are done in black and red. The lip is decorated in red, black, or a combination of the two. 33% of the sample has fire-clouding on the exterior of the vessel.

***Interregional comparisons:*** This group and the dominant Saxche type is extremely wide-spread and appears at every site in the Maya lowlands and many of the major highland centers. Chantuori, on the other hand, is very rare in the Maya world, but occasionally appears at Tikal (Culbert n.d.), El Mirador (Forsyth 1989:106-7), the Dolores Valley (Laporte *et al.* 1993:104), and Uaxactun (R.E. Smith and Gifford 1966:156). Uacho Black-on-Orange was defined as a Tepeu 1 type by R.E. Smith and Gifford (1966) and has been identified at Tayasal-Paxcaman (Chase 1984:34), La Joyanca (Forné 2005:424-6), Altar de Sacrificios (Adams 1971:30), and Becan (Chase 1984:34). Bowls and plates are the most common forms.

At Salinas de los Nueve Cerros, Dillon (1979:104) identified Pachach Black-on-Orange, which is a flaring-walled bowl with a black interior, a dull orange interior, and broad-painted designs in a streaky black. At Tonina (Becquelin and Baudez 1984:254), a simple Black-on-Orange dichrome was identified, Suchila Orange Dichrome, which has an orange slip with a black or red lip (this type might be present at Cancuen as well, c.f. Forné *et al.* 2007). Black on Orange “goblets” were also identified but not typed at Tonina (Becquelin and Baudez 1984:267-8).

***Intraregional comparisons:*** Polychrome caves are found in caves in the down-river part of the Candelaria system the eastern part of the San Francisco Hills; the bichrome is limited to the latter area.

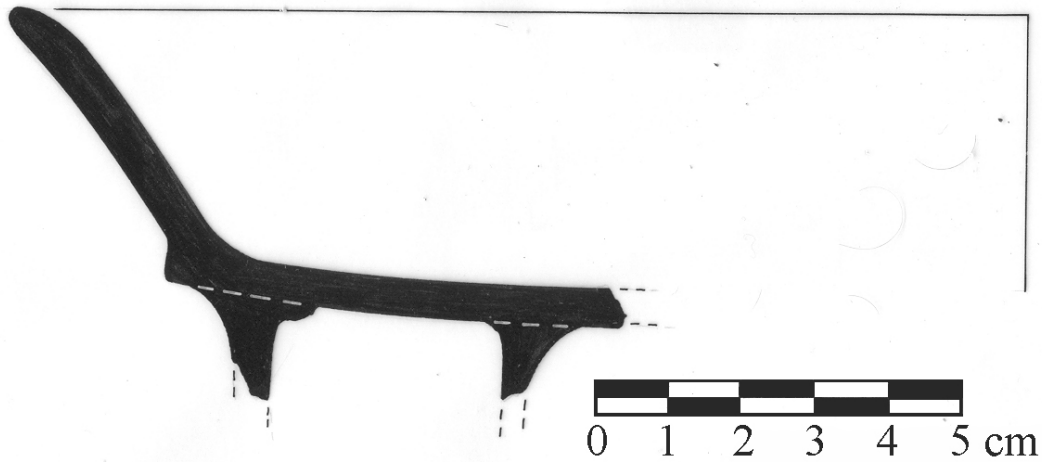
**Observation:** This type was separated from Palmar Orange polychrome through a few modal differences—a plain basal flange is often present, and the vessel tends to be more open than its later counterpart, Palmar Orange Polychrome. The vessels are generally smaller, however.

*Palmar Group* (1% of the Late Classic sample)

**Ware:** Petén Glossy

**Complex:** Tepeu 2

**Sample:** 43 sherds and one complete vessel, 20 of which were subjected to a more detailed analysis. The sample includes 33 body sherds, 5 rims, and 5 special body sherds.



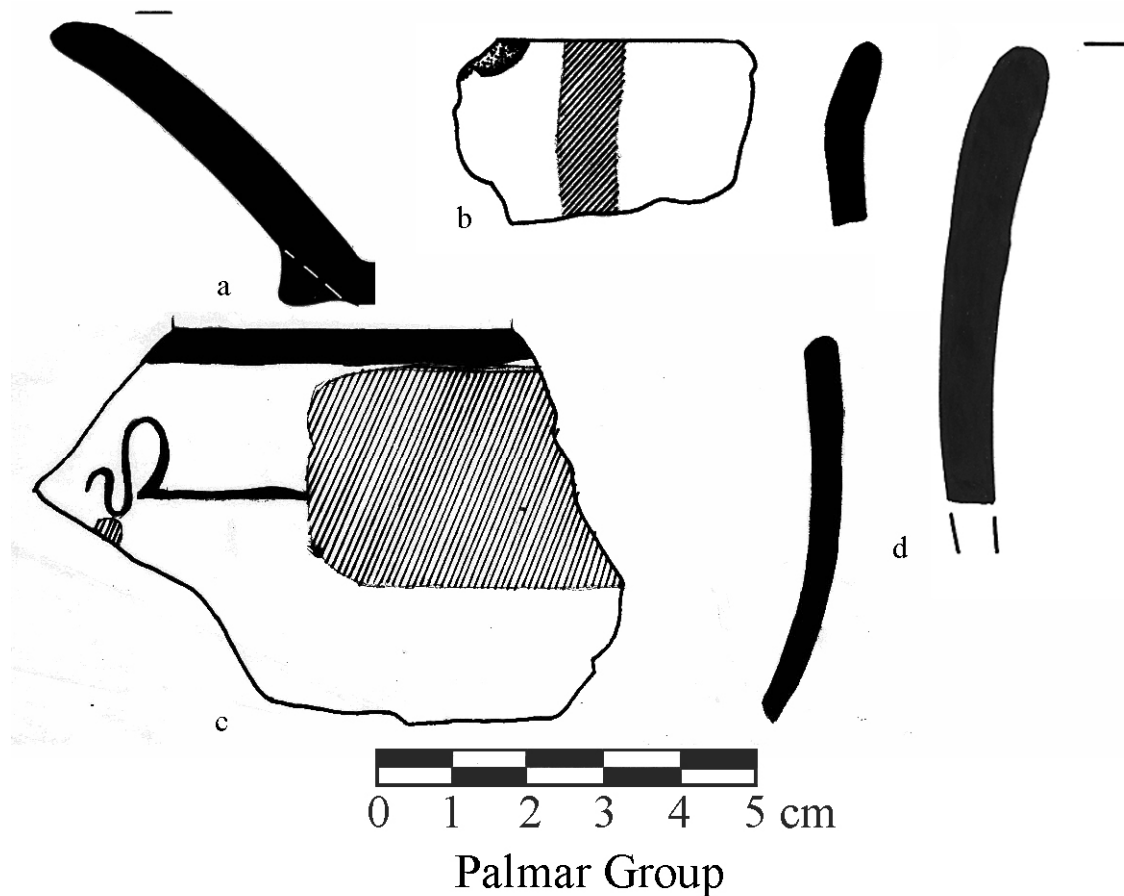
Palmar Group

**Figure 7- 25: Palmar Group, Palmar Orange Polychrome:Palmar**

**Principal identifying modes:** 1) A plate or barrel with 2) a primary orange slip and decorations atop it in black or red; 3) fine orange slip with quartz temper.

**Paste:** The paste color is normally a light orange (5YR7/4 to 7/8), although it ranges between a light orange and a light red (10R6/6 to 7/6). The temper is normally fine

quartz (67%), although fine (6%) or medium (6%) calcite and medium quartz (22%) are also present. There are normally ferruginous inclusions (82%) and one example with mica. There is a thick dark nucleus present in 63% of the sample.



**Figure 7- 26: Palmar Group, a, d) Palmar Orange Polychrome:Palmar; b) Leona Red-on-Orange; c) Palmar Orange Polychrome:ND/Smudged Interior**

**Slip:** The vessels were slipped reddish orange (10R5/8), orangish red (2.5YR4/8 to 7/6), or yellowish orange (7.5YR5/6), and 38% of the sample has a cream underslip. There is fire-clouding present in 31% of the sample. The majority of the sherds are only slipped on the exterior side (76%) to the base. 15% of the sample is slipped on both sides (including the base), and the other 4% is slipped on both sides.

**Forms:**

- 1) A general cup form (77%) with a flat base.

2) A plate with sloping walls (11%) and a flat base with a modified basal flange 4.3 cm below the lip, which is rounded (33%), squared (33%), or with an interior bevel (33%). The diameter is 28 cm.

3) A plate with flaring walls (5%) with a modified basal flange 5.8 cm below the interior beveled (50%) or rounded (50%) lip. The diameter is 28.5 cm (27-30 cm).

4) A general plate or bowl form (8%).

5) A barrel (5%) with a rounded or squared lip and an 18.5 cm (16-21 cm) diameter. The height of the vessel is 14.6 cm.

6) A round, slightly incurving bowl (2%) with a rounded rim and a 23 cm diameter. The wall thickness is 8.4 mm.

***Type:variety Designation:*** Two types and a total of 3 varieties are present in this sample:

Palmar Orange Polychrome:Palmar (R.E. Smith and Gifford 1966:160)—38 sherds (figure 7-24, figure 7-26 *a, d*) and 1 complete vessel

Palmar Orange Polychrome:ND/smudged interior (established here)—1 sherd (figure 7-26 *c*)

Leona Red-on-Orange:Leona (R.E. Smith and Gifford 1966:157)—1 sherd (figure 7-26 *b*)

***Decoration:***

1) *Polychrome* (96%): Designs are painted over the primary slip in red and black and consist mostly of geometric designs, although there is one example with a zoomorphic figure and another with a Primary Standard Sequence just below the rim. The lip was slipped red or black or just left orange.

2) *Bichrome* (2%): A simple geometric design was created with a red secondary slip on the exterior of a rounded bowl.

3) *Polychrome and smudged* (2%): A variation of the Serpent Head X complex was composed on the exterior of the vessel in black and red, and the interior was smudged black up through the lip. The decoration is found on a barrel form.

***Interregional comparisons:*** Like Saxche Orange Polychrome, this type is extremely wide-spread, appearing at every site throughout the lowlands and at many sites in the highlands. It was not present in Alta Verapaz, however.

Interior smudging is a common northern highland mode, although it begins to be used in the lowlands in the Late Classic, where it is restricted to Zopilote Smudged (see description above). The external decoration is a common motif in Early Classic polychromes from the Candelaria Caves and is present in Late Classic contexts at Uaxactun (Tzakol 3), outside of Huehuetenango, and potentially at Jaina (R.E. Smith 1955 vol. 1:70).

Red-on-orange types are present in small quantities in the Maya lowlands, at Uaxactun (R.E. Smith and Gifford 1966), At Tikal (Culbert n.d.), this style was only present in the Ik complex and was identified as Desquite Red-on-Orange, which is similar to Saxche Orange Polychrome but without black slip. This same type was identified at El Mirador (Forsyth 1989:106) and La Joyanca (Forné 2005:432-4) as a general Tepeu type.

Coabano Red-on-Orange (Holley 1983:434-5) is a related but unique type that was first covered with a cream underslip, then decorated with designs in red before slipping the vessel orange. At Tonina, two non-designated types were identified (Becquelin and Baudez 1984:268, 270), “Brown-red on Cream or Orange” and “Fluted

Red-on-Orange.” Jelic Red-on-Orange (Ichon 1992:171-2, see below) was found at Los Cerritos Chijoj.

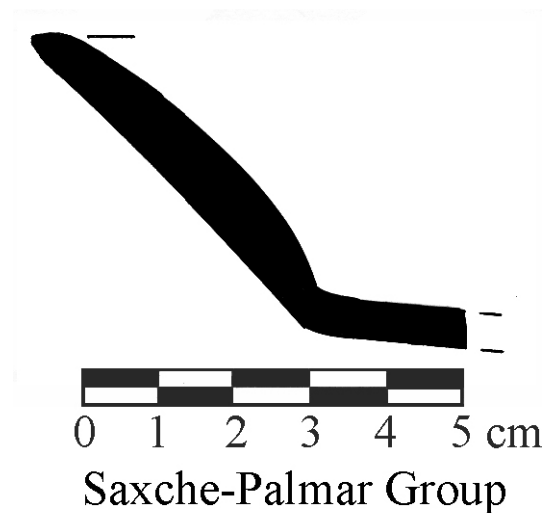
***Intraregional comparisons:*** The polychrome sherds are found in the northern  $\frac{3}{4}$  of the region—caves in the Candelaria system and the San Francisco Hills, La Caoba Vieja, and Tres Islas. The smudged sherd is from Candelaria, and the bichrome is from the San Francisco Hills.

*General Saxche-Palmar Group* (less than 1% of the Late Classic sample)

***Ware:*** Petén Glossy

***Complex:*** Tepeu

***Sample:*** 33 sherds. 26 were subjected to a more detailed analysis. The sample includes 12 rims, 7 bodies, 6 bases, 2 special bodies, and 5 rim-to-base sherds.



**Figure 7- 27: General Saxche-Palmar Orange Polychrome**

***Principal identifying modes:*** 1) A plate or barrel with 2) a primary orange slip and designs done in black and red atop it; 3) red, orange, or yellow paste with quartz or calcite temper.

**Paste:** The color is highly variable, from a dark red (7.5R4/6) to light yellow (7.5YR8/2), although it tends to be a reddish orange (2.5YR6/4 to 7/4). The temper is most commonly fine quartz (47%); less commonly medium quartz (29%), medium calcite (5%), or a medium calcite and quartz (14%) or quartz and sand (5%) mixture. The inclusions are most commonly black ferruginous (71%), but charcoal (4%) and red ferruginous (4%) inclusions are also present. There is a dark nucleus present in 79% of the sample.

**Slip:** Like its predecessor Dos Arroyos Orange Polychrome: Dos Arroyos, the vessels were slipped reddish orange (10R3/6 and 4/8), orangish red (2.5YR5/8) or yellowish orange (5YR5/6 to 6/8), often with a cream underslip (43% of the sample). 29% of the sample has fire-clouding present on the exterior. The sherds are normally slipped on both sides (63%) with both slipped and unslipped bases. The rest of the sample is split relatively evenly between slip on only the interior (13%) or exterior (13%) or on the interior and exterior between the lip and flange (8%). 2 sherds have indeterminate slip placement.

**Forms:**

1) A tripod plate with flaring walls (29%), occasionally with a small basal flange 4.2 cm below the rounded (57%), squared (14%), or interior beveled (29%) rim. The vessels are 5.3 cm tall (5.2-5.4 cm); the diameter is 31.2 cm (24-41 cm). The wall thickness is 8.1 mm (7-8.9 mm).

2) A general plate or bowl form (29%) with a flange 3.2 cm below the interior beveled (50%) or rounded (50%) rim and a 22.5 cm diameter (21-24 cm). The wall thickness is 6.6 mm (5.5-7.4 mm).

3) A tripod plate with sloping walls (25%), a flat base, and a small basal flange 3.7 cm below the rim (2.8-6.4). The supports are hollow, probably cylindrical feet; the vessel has a 26.8 cm (23-32 cm) diameter. The wall thickness is 7.2 mm (5.2-8.6 mm).

4) A barrel with slightly bulging walls (8%), a rounded lip, and a 15 cm diameter. The wall thickness is 6.1 mm (5.3-6.8 mm).

5) A sloping-walled plate (4%) with a flat base and a 3.45 cm height (3.4-3.5 cm). The rim is rounded and the diameter is 20 cm. The wall thickness is 5.5 mm

6) A cup with flaring walls (4%) with a rounded lip and a 21 cm diameter. The wall thickness is 5 mm.

***Type:variety Designation:*** Both Saxche and Palmar Orange Polychromes were established by R.E. Smith and Gifford (1966), but it has become common practice to combine the two when samples are small and/or eroded (figure 7-27).

***Decoration:*** Atop the primary slip, simple or complex geometric designs were painted in red and black. The lip is slipped in red, black, or a combination of the two.

***Interregional comparisons:*** See descriptions for Saxche and Palmar Orange Polychromes above.

***Intraregional comparisons:*** These sherds are found in the northern  $\frac{3}{4}$  of the region—caves in the down-river part of the Candelaria system, the eastern part of the San Francisco Hills, La Caoba Vieja, and Tres Islas.

***Observation:*** This designation was used when it was impossible to separate sherds into a more refined chronological framework.



*Sibal Group* (less than 1% of the Late Classic sample)

**Ware:** Petén Glossy

**Complex:** Tepeu 1

**Frequency:** 1 body-to-base sherd

**Principal identifying modes:** 1) A plate with 2) a buff primary slip and 3) a light pink paste with calcite temper.

**Paste:** The paste is a light pink (10R7/6) with medium calcite temper, red ferruginous inclusions, and a thin dark nucleus.

**Slip:** The vessel was slipped buff (5YR8/3) on the exterior over a cream underslip.

**Form:** A plate with flaring walls and a flat base. The wall thickness is 6.2 mm.

**Type:variety Designation:** This sherd belongs to an established type:

Bejucal Black-on-Buff (originally established as Bejucal Brown-on-Buff by R.E. Smith and Gifford [1966:155], and changed to Black-on-Buff by Laporte [pers. comm. 2006].

**Decoration:** Simple geometric designs appear in red over the primary slip.

**Interregional comparisons:** This type has only been found in the southeastern Petén (Laporte 1995:61, Laporte pers. comm. 2006) and Uaxactun (R.E. Smith and Gifford 1966:155). Chinos Black-on-Cream has been identified at El Mirador (Forsyth 1989:111-2), Uaxactun (R.E. Smith and Gifford 1966:156), and Tikal.

**Intraregional comparisons:** This sherd was found in Tres Islas.

**Observation:** The change from brown-on-buff to black-on-buff was based on Laporte's observation that the brown was most likely black when it was placed.

*Batcab Group* (less than 1% of the Late Classic sample)

**Ware:** Petén Glossy

**Complex:** Tepeu 2

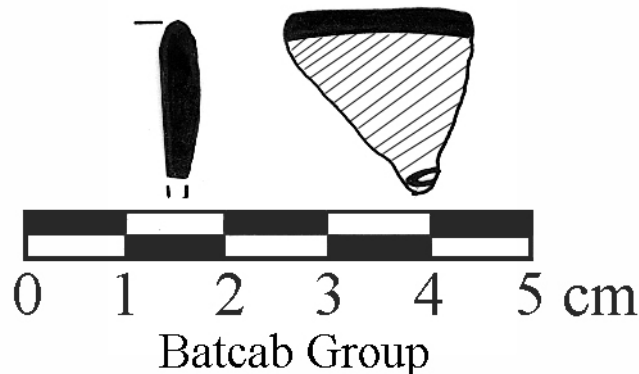
**Frequency:** 1 body sherd

**Principal identifying modes:** 1) A cylinder with 2) a red primary slip with decorations in black; 3) pink paste with quartz temper.

**Paste:** The paste is a light pink (2.5YR7/6) with fine quartz temper and ferruginous inclusions.

**Slip:** The vessel was slipped red (10R4/6) directly over the exterior surface of the vessel. There is fire-clouding present.

**Form:** A cylinder with a rounded lip and a 14 cm diameter. The wall thickness is 5 mm.



**Figure 7- 28: Batcab Group, Yuhactal Black-on-Red:Yuhactal**  
**Type:variety Designation:** This sherd belongs to a rare Central Petén type:

Yuhactal Black-on-Red (R.E. Smith and Gifford 1966:164, figure 7-28)

**Decoration:** The exterior of the vessel had indeterminate designs composed with a secondary black slip.

**Interregional comparisons:** This type is very rare, but has been identified at Uaxactun (R.E. Smith and Gifford 1966:164), Tikal (Culbert n.d.), La Joyanca (Forné 2005:431-2), and the Dolores Valley (Laporte *et al.* 1993:104-5).

**Intraregional comparisons:** This sherd comes from the San Francisco Hills.

*Zacatel Group* (less than 1% of the Late Classic sample)

**Complex:** Tepeu

**Sample:** 11 sherds. 7 were subjected to a more detailed analysis. The sample consists of 5 bodies, 5 rims, and 1 base.

**Principal identifying modes:** 1) A plate or bowl with 2) a cream slip and designs in black and red atop it; 3) orange paste with quartz temper.

**Paste:** The paste is most commonly a light orange (5YR7/4 to 8/4) but ranges to light pink (10R7/6). The temper is most commonly fine (57%) or medium (14%) quartz temper, but it is occasionally fine calcite (14%) or a mix of medium calcite and quartz (14%). There are black (63%) or red (18%) ferruginous inclusions in all but two examples. There are two examples with a thick dark nucleus.

**Slip:** The vessels were slipped cream (5YR7/3 and 8/1, 7.5YR8/1 and 8/3). There is fire-clouding present in 9% of the sample. The majority of the sherds are slipped on both the interior and exterior (55%) including the base. 36% of the sample is only slipped on the exterior; the final 9% only has interior slipping.

**Forms:** One of the sherds is of an indeterminate form.

1) A general plate form with a rounded lip and a 26 cm diameter. The wall thickness is 6.3 mm (5.4-7.1 mm).

2) A general cup form with a wall thickness of 5.5 mm.

3) A round bowl or plate with a flat base, a rounded lip, and a 34 cm diameter.

The wall thickness is 5.9 mm.

**Type:variety Designation:** All of the sherds belong to the same type:

Zacatel Cream Polychrome:Zacatel (R.E. Smith and Gifford 1966:164)

**Decoration:** The sherds are all decorated with geometric designs in black and red with a red lip. One example has an orange underslip.

**Interregional comparisons:** This type has been identified at Uaxactun (R.E. Smith and Gifford 1966:164), Tikal (Culbert n.d.), El Mirador (Forsyth 1989:112-4), Altar de Sacrificios (Adams 1971:41), La Joyanca (Forné 2005:454-5), Naj Tunich (Brady 1989:211), and the Dolores Valley (Laporte *et al.* 1993:102). Its presence was noted in the Petexbatun region (Foias 1996: 557-73) but not separated from Palmar Orange Polychrome. The Dolores sample seemed to be restricted to ceremonial areas.

A related type, Quixchap Cream Polychrome (Dillon 1979:139-40) was identified at Salinas de los Nueve Cerros. Based on the form and design, Dillon proposed a Tepeu 1 date for the type.

**Intraregional comparisons:** All of the sherds come from caves in the eastern part of the San Francisco Hills.

### **Imitation Petén Glossy**

*Rub'el Group* (less than 1% of the Late Classic sample)

**Ware:** Imitation Petén Glossy

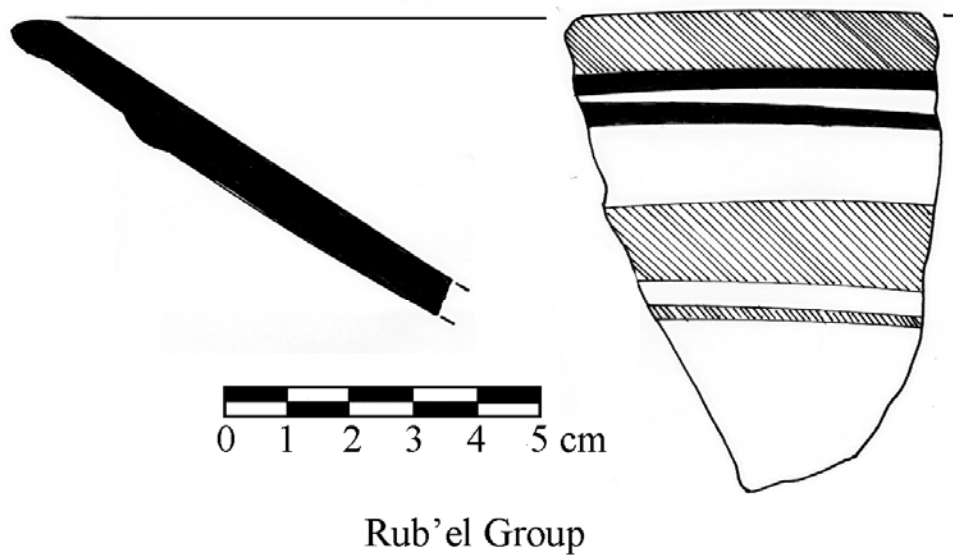
**Complex:** Jolom

**Sample:** 8 sherds and 1 partial vessel, all of which were subject to further analysis. The sample is composed of 3 rims, 3 body-to-base sherds, 1 body, 1 base, and 1 appendix.

**Principal identifying modes:** 1) A plate with 2) a lustrous orange primary slip and designs in black and red; 3) pink or orange paste with ash and calcite temper.

**Paste:** The paste is a light pink (10R7/4) with a temper composed of fine quartz. There are either black or red ferruginous inclusions. The imitation Saxche-Palmar sherds have a distinct paste within the sample, one identical to Cebada Porous (see above). It is orangish red (10R5/6), pinkish orange (2.5YR7/6), or light orange (5YR6/8) with organic or fine volcanic ash temper. One example has ferruginous inclusions, and all have a dark nucleus.

**Slip:** The vessel was slipped orange (5YR6/8), over a cream underslip. The slip is very lustrous—identical to Saxche-Palmar Group ceramics. Most of the sample is slipped on both the interior and exterior (67%), although zoned slip on the interior and the upper part of the exterior (22%) or only on the interior (11%) are also found.



**Figure 7- 29: Rub'el Group, Imitation Saxche-Palmar Orange Polychrome**

**Forms:**

1) A tripod plate with hollow feet, sloping walls, and a flat or rounded base. A modified basal flange is located 2.9 cm (2.6-3.2 cm) below the interior beveled rim; the diameter is 26.5 cm (24-31 cm). The vessel without the supports stands 3.4 cm tall. Unlike standard lowland forms, the support starts right on the flange. The wall thickness is 7.9 mm (7.1-8.9 mm).

2) A tripod plate with flaring walls (25%), a flat base, and hollow feet that overlap with a small basal flange. The vessel without the supports stands 5.1 cm, the diameter is 25 cm, and the rim has an interior bevel. The wall thickness is 8.7 mm.

3) A plate with sloping walls with an interior beveled (50%) or rounded (50%) lip. One example has a small basal flange 1.5 cm below the lip. The diameter is 28 cm (27-29 cm); the wall thickness is 7.1 mm (5.7-8.9 mm).

**Type:variety Designation:** This group and all types are established here:

Rub'el Polychrome:Rub'el—1 sherd

Imitation Saxche-Palmar—3 sherds (figure 7-29)

Lem Red-on-Orange:Lem—1 sherd

Lem Red-on-Orange:ND/smudged interior—4 sherds

**Decoration:**

1) *Polychrome*: Geometric patterns were composed in black and red on the exterior of a tripod plate, although they were badly executed.

2) *Bichrome*: The slip is slightly duller than Rub'el Orange Polychrome:Rub'el but still more lustrous than northern highland types. This decoration is limited to a tripod plate.

3) *Bichrome with smudged interior*: The design is simple and done in red over the primary orange slip. All of the slips are duller than lowland types (and the polychrome in this group) but more lustrous than the highland types. This decoration corresponds to all reported forms for the group.

***Interregional comparisons***: For a general discussion of orange polychromes in the Late Classic, see the discussions for Saxche and Palmar Orange Polychromes. This variety is very similar in form and execution to Lem Red-on-Orange.

Gualpopa Polychrome and Copador Polychrome are two common types in the Copan region (c.f. Willey, Leventhal, *et al.* 1994:50-1, R. Viel 1983:520-2) that are normally interpreted as imitations of Saxche and Palmar group ceramics that developed into a strong regional tradition. Pseudoglyphs are common and, at least with the earlier Gualpopa, the vessels are generally less-well-made than its contemporaries in the Maya lowlands.

For a general discussion of red-on-orange types in the Late Classic, see the description for Leona Red-on-Orange above. The blurry nature of the designs might be due to polishing after applying the decoration (see Ichon 1992:170) and is present on several examples of bichromes and polychromes in Los Cerritos Chijoj (*Ibid.*) and in the Early Classic at Salinas de los Nueve Cerros (Dillon 1979:116-7).

The paste of the imitation Saxche-Palmar sherds is identical to Cebada Porous, although obviously the function and surface treatments were very different. Organic tempering is extremely rare in the Maya world, but is occasionally present in Alta Verapaz (Arnauld 1986), Yaxchilan (López Varela 1989), and Salinas de los Nueve Cerros (Dillon 1979), as well as in the present sample.

***Intraregional comparisons:*** Rub'el is found in a cave in the eastern part of the San Francisco Hills, and Lem is found in 2 areas—the smudged variety is limited to one cave in the Candelaria system, and the dominant variety is found in the San Francisco Hills.

The “blurry” decoration has been found on a few Early Classic polychromes from the Candelaria Caves (see description for Dos Arroyos Orange Polychrome: Dos Arroyos above).

***Observation:*** This type differs from Saxche and Palmar Orange Polychromes in several ways—the surface, while glossy, has designs that are poorly executed, and the form is unique, with a roughly-finished, wide basal flange and tripod supports that begin on the flange. The paste is identical, however, to regular Tepeu ceramics.

Of the three types present in this sample, Rub'el and Lem are the most closely related.

### ***Cahabon Flakey Ware***

*Nopal Group* (less than 1% of the Late Classic sample)

***Ware:*** Cahabon Flakey

***Complex:*** Coban 2 (Early Classic)

***Frequency:*** 1 rim sherd and one partial vessel, both of which were subjected to a more detailed analysis.

***Principal identifying modes:*** 1) A cylinder with 2) a lustrous orange primary slip and designs in red accentuated with black; 3) a light orange paste with ash temper.

***Paste:*** The paste is a light pink (10R7/4) or orange (5YR5/6) with a temper composed of fine ash temper with pumice inclusions.



**Surface treatment:** The vessels were slipped orange (5YR6/8) directly onto the vessel. The slip is normally rough and fragile and limited to the exterior of the vessel.

**Forms:** A cylinder with squared lips, a flat base, and an 11 cm diameter. The thickness is 7.1 mm.

**Type:variety Designation:** Only one established type is present in the sample:

Nopal Trichrome:Nopal (Arnauld 1986:344)

**Decoration:** Both of these sherds are decorated with simple geometric patterns in black and red.

**Interregional comparisons:** Trichromes are not present in Late Classic lowland contexts, where polychromes were fully developed. The final product is more related to lowland bichromes (see discussion for Leona Red-on-Orange above). This is more of a highland mode, one that is present and designated Nopal in Alta Verapaz (Arnauld 1986:344) and Los Cerritos Chijoj (Ichon 1992:193).

**Intraregional comparisons:** This group is only present in Hun Nal Ye.

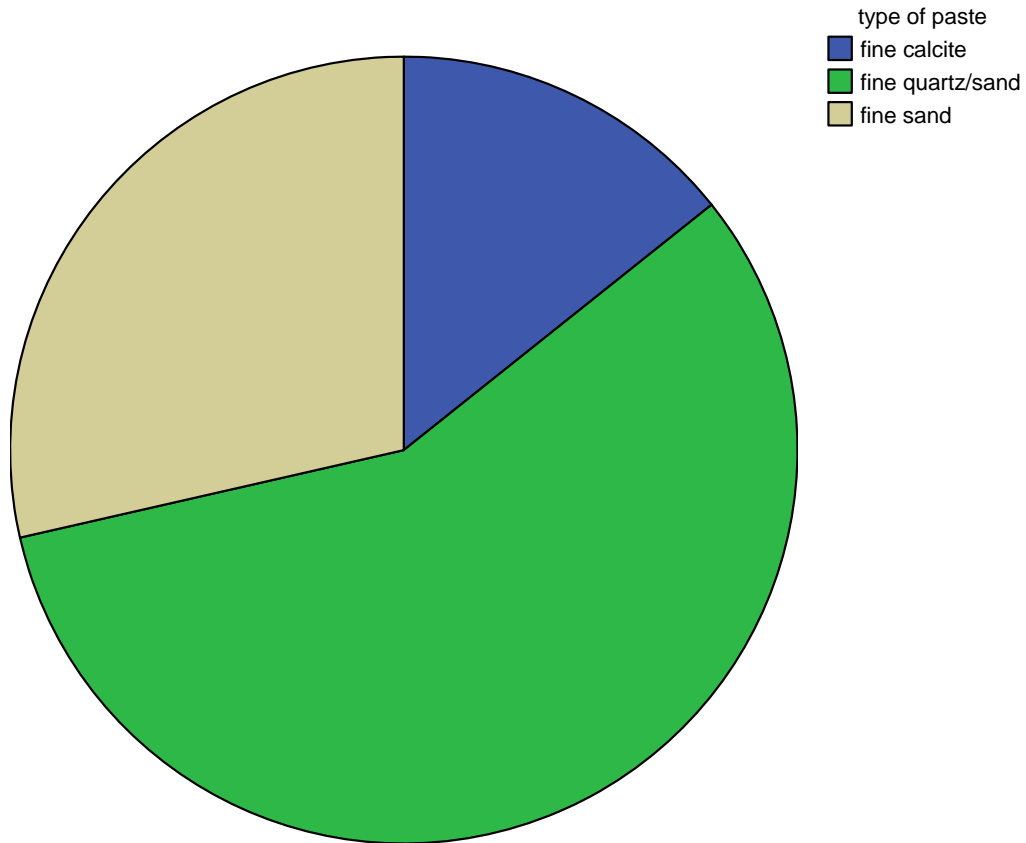
**Observation:** This is not a true polychrome, as the black slip was only used to emphasize decorations done in red.

## **Ru Complex (800-1000 A.D.)**

The Terminal Classic is most prominent around the Candelaria Caves, where settlement continued after the collapse of Cancuen. It consists of a few markers mixed in with general Late Classic wares. There is a small amount of Terminal Classic material that was recovered from Hun Nal Ye too.

Most of the Ru wares are imitations of the Fine Orange and Fine Grey vessels found further to the north. The form is most commonly a tripod plate (38%), a plate with

sloping walls (23%), or a round bowl (23%). Cylinders and indeterminate plate forms compose 8% of the sample each.



**Figure 7- 30: Ru Pastes by Sherd Count**

The paste (figure 7-30) is most commonly fine volcanic ash (44%) followed by medium quartz (22%), fine sand (22%), or fine calcite (11%). All of the vessels are slipped either red (69%) or orange (31%). The sherds are most commonly incised (46%) or undecorated (38%), although 15% of the sample is a bichrome with additional smudged decoration.

## **Monochromes**

### ***Imitation Fine Orange Ware***

*K'ot Group* (69% of the Terminal Classic sample)

**Ware:** Imitation Fine Orange

**Complex:** Ru

**Sample:** 8 sherds and one complete vessel, of which 3 were subjected to a more detailed analysis. The sample includes 4 bodies and 4 rim sherds.

**Principal identifying modes:** 1) A plate with 2) a powdery, fragile orange volcanic temper; 3) heavily-eroded red slip.

**Paste:** The paste is extremely fragile and powdery, completely unable to hold glue for more than a few days before falling apart again. The paste is a light orangish red (10R5/8) or light orange (2.5YR7/8) with fine volcanic ash or fine sand. All examples have ferruginous inclusions.

**Slip:** There remains some evidence of a thin reddish slip (10R5/8), although most of it has eroded. The paste is slightly less rough than the Chachab' group ceramics, and it has fired to a strong orange on the surface.

**Form:**

1) tripod plate with flaring walls and a rounded lip. The supports are round and hollow and 3.5 cm tall. The diameter is 27 cm and the height of the plate without supports is 3.9 cm. The wall thickness is 5.4 mm.

2) A plate with sloping walls, a flat base, a pointed lip, and a 25 cm diameter. The wall thickness is 5.1 mm.

3) A general plate form with a wall thickness of 4 mm.

**Type:variety Designation:** The group and both of the types present in the sample are defined here.

K'ot Orange:K'ot—4 sherds and 1 complete vessel

Mul Incised:Mul—4 sherds

***Decoration:***

1) *Plain:* The undecorated sherds are either tripod plates or an indeterminate plate form.

2) *Incised:* The decoration is limited to “cheese-grater” incisions on the flat interior surface.

***Interregional comparisons:*** This type is a very local adaptation of Terminal Classic modes; in this case, Altar Orange. This group has a wider distribution than Fine Grey and serves as a good chronological marker.

The incised sherds are a local adaptation of Trapiche Incised. The color and incisions are similar with the exception of the very rough texture of the paste. The form, however, is closer to the Tepeu 3 Lombriz Orange Polychrome reported at Seibal (Sabloff 1975: 190-1, figures 367-9). Trapiche Incised is found at nearly every site that Altar Orange is found in.

***Intraregional comparisons:*** This group is limited to La Lima. The related Altar Orange is very rare in the region as well, although there is a very small quantity present at Cancuen (Bill 2001:196). It appears that all of the other sites collapsed and were abandoned before Fine Orange became the dominant fine ware.

***Cahabon Flakey Ware***

*Papur Group* (15% of the Terminal Classic sample)

***Ware:*** Cahabon Flakey

**Complex:** Canilla

**Sample:** 2 whole vessels, both of which were subjected to a more detailed analysis.

**Principal identifying modes:** 1) A bowl with 2) an orange slip and reed impressions on the exterior; 3) orange paste with calcite or sand temper.

**Paste:** The paste is a reddish orange (2.5YR4/6) with fine calcite or sand temper. Half of the sample has ferruginous inclusions.

**Slip:** The vessels were slipped a light, reddish orange (2.5YR4/6 and 5/6) on both sides to the base.

**Form:** A round bowl with a squared lip, a direct rim, and a flat base. The vessel is 8.1 cm tall; the diameter is 11 cm. The wall thickness is 5.1 mm (4.5-5.7 mm).

**Type:variety Designation:** Ichon (1992:182) at Los Cerritos Chijoj identified this type, although it was called Papur Orange Decorated (in contrast to Papur Orange Simple). I have changed the name to be consistent with the rest of the analysis:

Sawyer Incised:Sawyer

**Decoration:** These vessels are decorated with either a line of reed impressions or a set of simple geometric incisions. One of the vessels has some dark fire-clouding on the exterior of the vessel.

**Interregional comparisons:** This type is present in Terminal Classic contexts at Los Cerritos Chijoj (Ichon 1992:182-3). While there are several orange-slipped types in Alta Verapaz during this time period (see above), the form and modes present in this type do not match anything recovered by Arnauld (1986).

Another related preliminary type from the Mid-Chixoy (Ichon and Cheesman 1983:119-21), “Polished Brown with Deep Incisions” has a bowl with a similar form and

a row of irregularly-placed reed impressions contained between two circumferential lines.

The bowl is slightly-incurving and has a diameter of 8 cm.

***Intraregional comparisons:*** This type has only been identified at La Lima.

***Observation:*** These vessels were dated to the Terminal Classic, both through identification with the Canilla complex and the specific context in which they were found, cached inside of a K'ot Orange plate. I have not compared these ceramics to Ichon's type collection, so the categorization is still preliminary.

## **Bichromes**

### ***Cahabon Flakey Ware***

*Jelic Group* (15% of the Terminal Classic sample)

***Ware:*** Cahabon Flakey

***Complex:*** Unknown

***Frequency:*** 1 complete and one nearly-complete vessel

***Principal identifying modes:*** 1) A cylinder or round bowl with 2) an orange primary slip and 3) zoomorphic designs in red that are 4) accentuated with smudged lines.

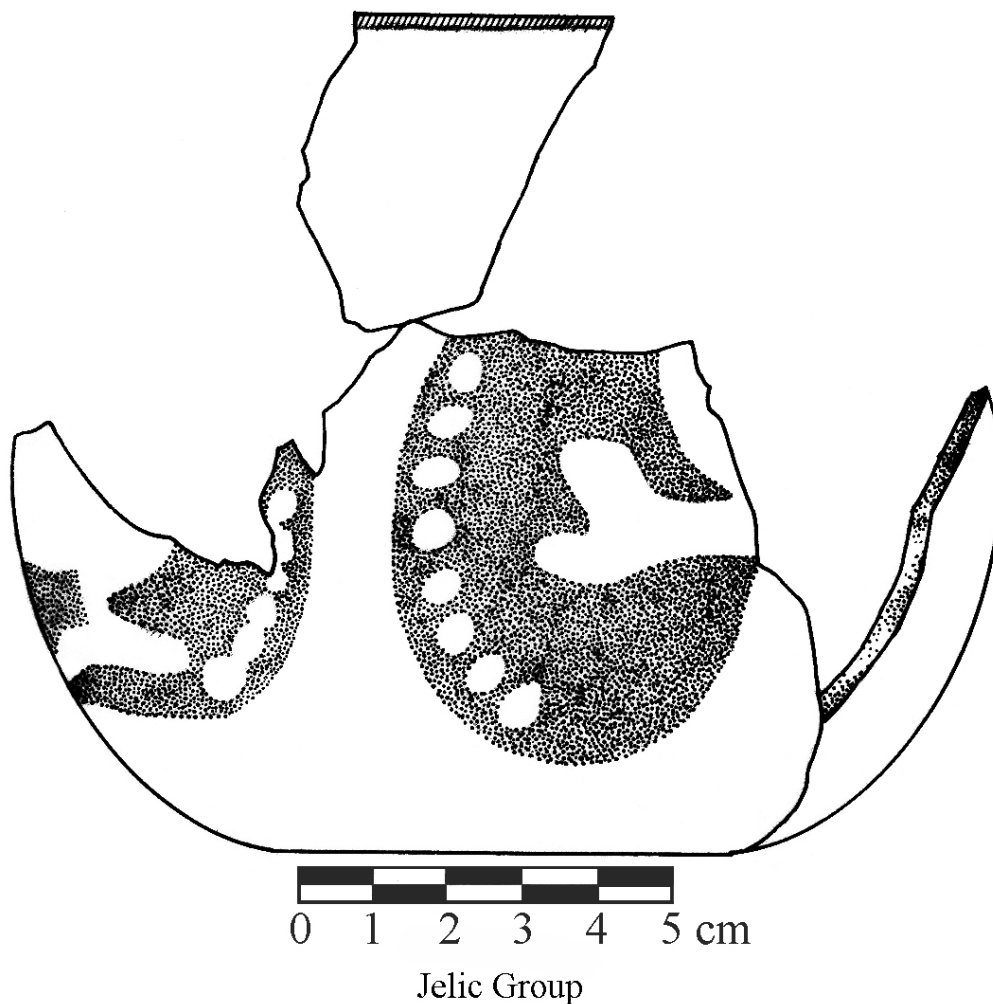
***Paste:*** A red paste with quartz temper.

***Slip:*** The vessel was slipped a smooth, glossy orange (2.5YR7/3). There might have been a greyish underslip on one example that is present on the base.

***Forms:*** 1) A small cylinder with a flat base, a 12.5 cm height, and a 12.1 cm diameter.

The lips are rounded; the wall thickness is 9 mm.

2) A round, slightly-incurving bowl with a round lip, a 9 cm diameter, and a flat base standing 12.9 cm tall. The wall thickness is 4.1 mm.



**Figure 7- 31: Jelic Group, Ch'inaus Red-and-Smudged-on-Orange:Ch'inaus**  
*Type:variety Designation:* While the group was defined by Ichon (1992:170), it lumped together several distinct forms of decoration, none of which correspond exactly to the present sample.

Ch'inaus Red-and-Smudged-on-Orange:Ch'inaus (figure 7-31)

**Decoration:** Complex zoomorphic designs were painted in red (5YR6/8 in one example) atop the exterior surface and emphasized by zoned smudging. The interior is also smudged.

***Interregional comparisons:*** Negative designs are common in the highlands, as are smudged interiors.

A nearly identical type was identified by Ichon (1992:172) at Los Cerritos Chijoj in the Terminal Classic, “Jelic Red-on-Orange:Jelic Red and Black Negative on Orange.” The forms are identical, although there are also several other bowl forms present in his sample. There are 2 minor differences between this type and Jelic—at Cerritos, the smudged designs are simple geometric shapes that are largely unrelated to the larger decoration and the interiors are the same orange as the exterior. A simpler variety of Jelic Red-on-Orange was found in an earlier context at La Lagunita (Ichon and Arnauld 1985:153-4).

***Intraregional comparisons:*** This type is limited to the Cave of Hun Nal Ye.

### **Is Complex (950-1300 A.D.)**

By the end of the Terminal Classic, the population seems to have moved completely out of the area, and shrine use ceases with the exception of one cave in the Candelaria system, where these two sherds were found. The types are related to the northern highlands—nearly identical types were found by Arnauld (1986).

The Is sample has either fine or medium volcanic temper and either a jar or Z-angle form. One vessel is undecorated and the other is incised; the vessels were slipped black or red.

### **Monochromes**

#### ***Cahabon Flakey Ware***



*Limón Group*

**Ware:** Cahabon Flakey

**Complex:** Is

**Sample:** 1 nearly complete vessel

**Principal identifying modes:** 1) A squat jar with four rounded handles, 2) a red slip, and 3) a red volcanic paste.

**Paste:** The paste is a dark red (10R4/6) with medium volcanic ash temper and pumice inclusions.

**Slip:** A thin, dark red slip was painted onto the exterior of the vessel to the base. It has fire-clouding on the exterior of the vessel.

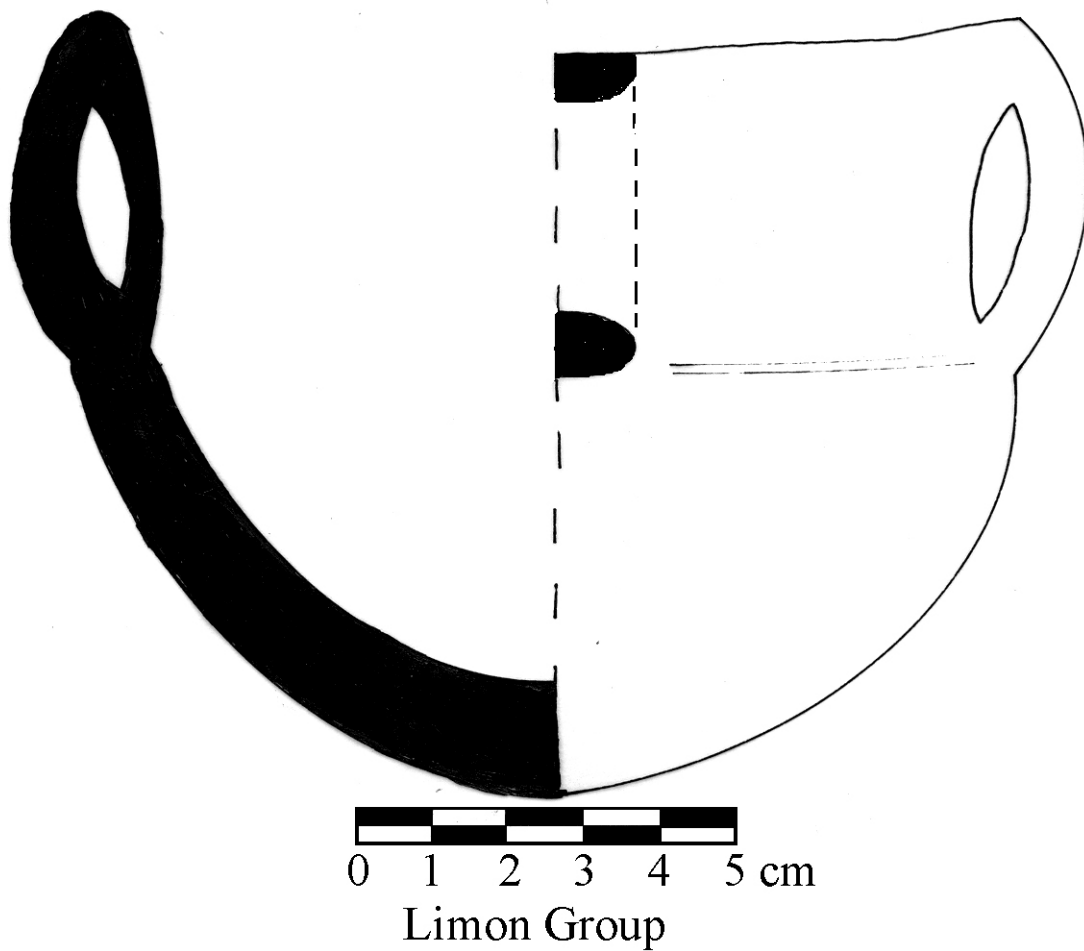
**Form:** A squat jar with four rounded handles connecting the interior beveled jar to the shoulder. The neck is 3.9 cm tall and the diameter is 9.9 cm. The diameter is 13 cm; the wall thickness is 15.9 mm.

**Type:variety Designation:** This vessel does not correspond to any known group or type, although it appears to be closely related to material from Alta Verapaz:

Limón Thick:Limón (figure 7-32)

**Decoration:** The vessel is undecorated.

**Interregional comparisons:** Several thick-walled (although not as thick as the present sample) vessels were described by Arnauld (1986:359-60), Jabilla Thick and Linaza Thick. The former is unslipped but has a strong reddish surface. The latter has a brown or black slip. Jars and comales are the most common forms. An eroded sherd belonging to a thick jar was found at La Lagunita (Ichon and Arnauld 1985:168).



**Figure 7- 32: Limón Group, Limón Thick:Limón**

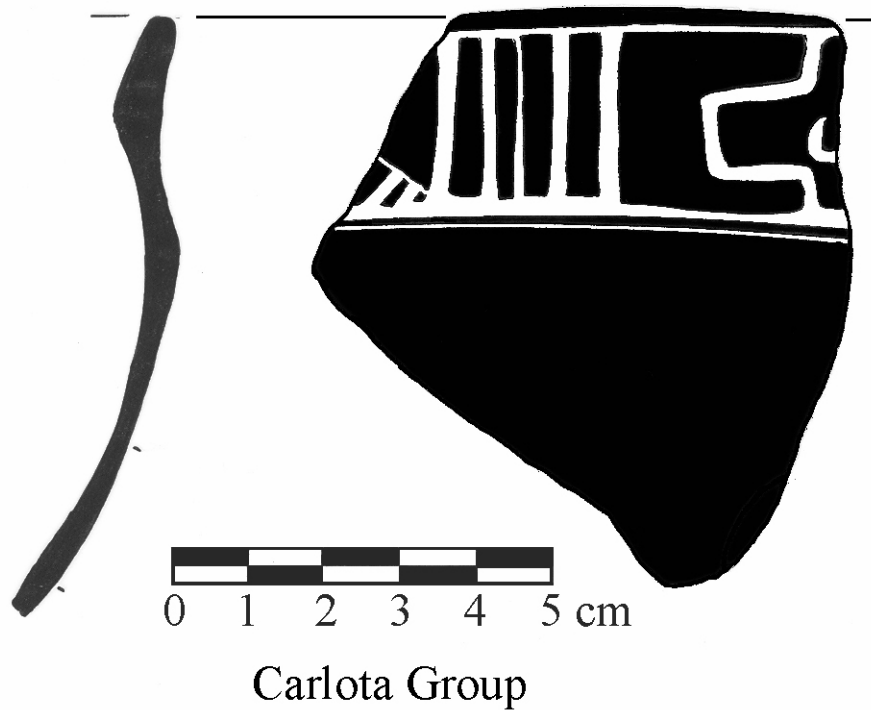
***Intraregional comparisons:*** This vessel was found in the Candelaria system. The rest of the area seems to be mostly abandoned during this time, although there is a small amount of squatter activity at Cancuen that was never formally analyzed.

***Observation:*** The dating of this vessel to the Early Postclassic is provisional, but the form, paste, and slip are common to the northern highlands during this time period.

*Carlota Group*

***Ware:*** Cahabon Flakey

***Complex:*** Samac



**Figure 7- 33: Carlota Group, Carlota Incised:Carlota**

**Sample:** 1 rim-to-base sherd

**Principal identifying modes:** 1) A curved Z-angle bowl with 2) a black slip, 3) incised pseudoglyphs, 4) evidence of an appendix, 5) and an orange volcanic paste.

**Paste:** The paste is a reddish orange (10R6/4) with fine volcanic ash temper and pumice inclusions. There is a thin dark nucleus present.

**Slip:** The slip is a dull, consistent black on both the interior and exterior of the vessel.

**Form:** A small, curved Z-angled bowl with a rounded lip. The angle is 2.9 cm below the rim and the diameter is 23 cm. There is a scar at the widest part of the vessel where an appendix was attached. The wall thickness is 5.3 mm.

**Type:variety Designation:** This sherd belongs to a new group and type:

Carlota Incised:Carlota (figure 7-33)

**Decoration:** Between the rim and the Z-angle there is an incised band of pseudoglyphs.

***Interregional comparisons:*** Arnauld (1986:360-1) defined Lima Brown Incised in Alta Verapaz, which is identical to Carlota in all but slip color, which she placed in Samac (Early Postclassic). Ichon has reported the same type at Los Cerritos Chijoj (1992:188), although in his sample, the type appears to have been Terminal Classic. The diameter of Arnauld's sample is between 15.8 and 20 cm; the wall thickness is 2-3 mm.

***Intraregional comparisons:*** This sherd is found in the Candelaria system. The rest of the area seems to be mostly abandoned during this time, although there is a small amount of squatter activity at Cancuen that was never formally analyzed.

## **Other Artifacts**

Like the ceramics, the other artifacts are all much more variable than in previous time periods, especially in La Lima. In addition to relatively standard artifacts such as obsidian blades, limestone and sandstone manos and metates, and chert bifaces, there are several artifacts only used in a very restricted area, such as the groundstone hand-axes common in Alta Verapaz, tools made out of quartz nodules (also common to the northern highlands) and molded ceramic "phalange" pendants, common to Cancuen, Raxruha, and other Transversal sites. There is some evidence of production in La Lima—figurine molds, pyrite waste, and quartz "grinders." For a complete discussion of non-ceramic artifacts, see Appendix A.

## **Conclusions**

The Late Classic is a period characterized by a high level of diversity though the region (figure 7-34). This diversity is apparently coupled with the founding of many new

communities, including at least one major center, Cancuen. While the regional survey is in its infancy, there is very little evidence of a local population before this time period, raising the question: Where was the population coming from?

The material evidence provides some answers. Many ceramic groups and stone tools are present in the assemblage, which indicate links to neighboring regions. However, in the case of La Lima and other settlements in the southern part of the region, the evidence may point to a northern highland origin for the local population. The ceramics are unique to this region—while the technology (paste and slip) used for these sherds are highland in nature, the forms and decoration are often more related to the transversal and highlands, which shows that there is still communication with people to the north, even though most of the imports into the region are apparently from further south into the highlands.

The northern half of the region, on the other hand, appears to be more of a melting pot, with ties to the central Petén, the Dolores Valley, the transversal, and Alta Verapaz overshadowed by a predominance of Cancuen types. Purely northern highland types are rare, and exotics have been found from this time period from Salinas de los Nueve Cerros and the central Petén.

While some of the groups have a mix of modes from different regions, for the first time there are actual *imitations* that are present in the sample—vessels with the form and decoration of one region (typically lowland) but with a completely different paste and technology from the actual material. These mimics are limited to high status vessels—Saxche-Palmar, Fine Orange, and Fine Grey—and are often found in a ritual context or, in one case, cached as part of a dedicatory offering. While there is too small of a sample

of these wares to say for sure, it appears that they were likely owned by people who did not have access to the real vessels, so they obtained or produced mimics.

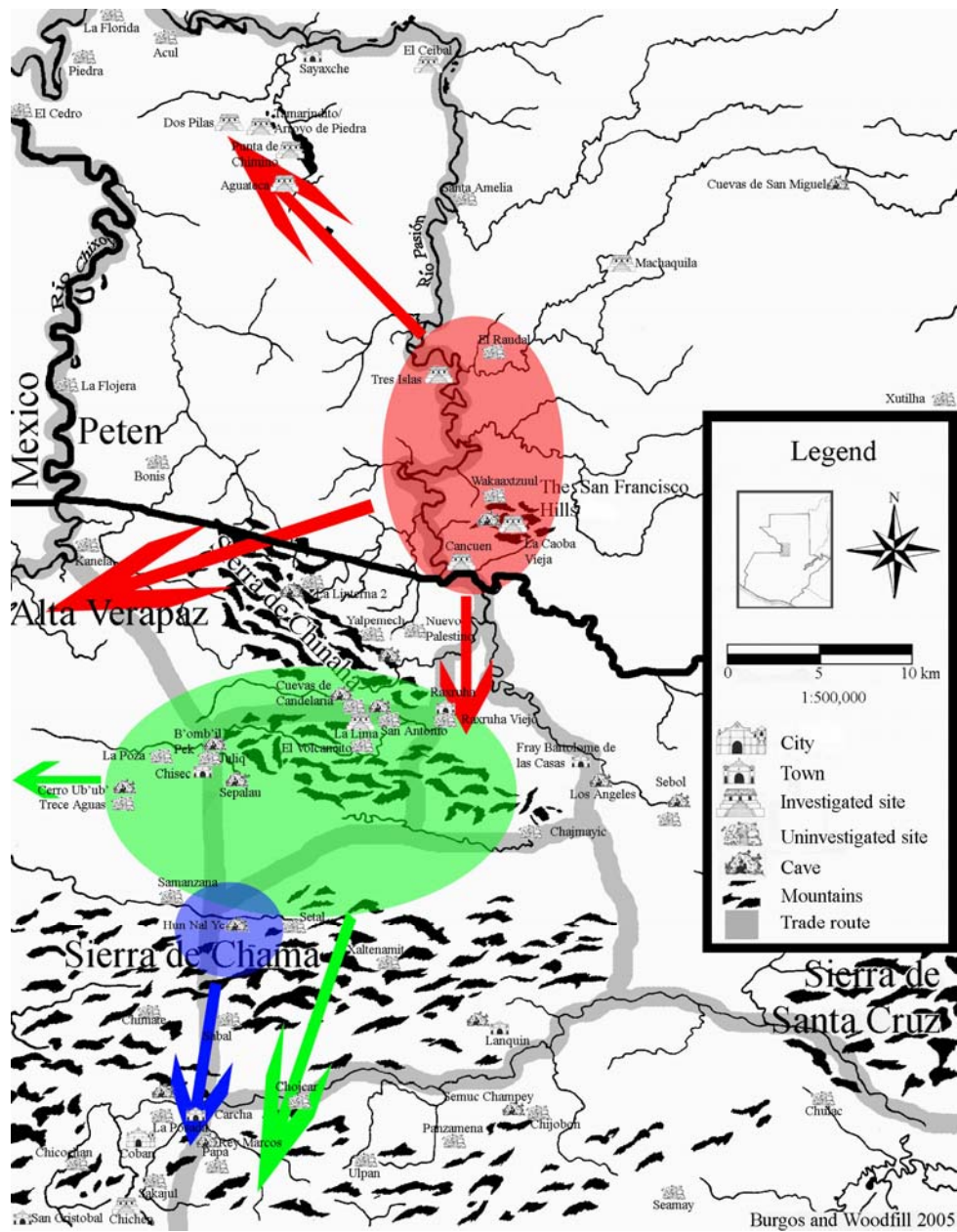
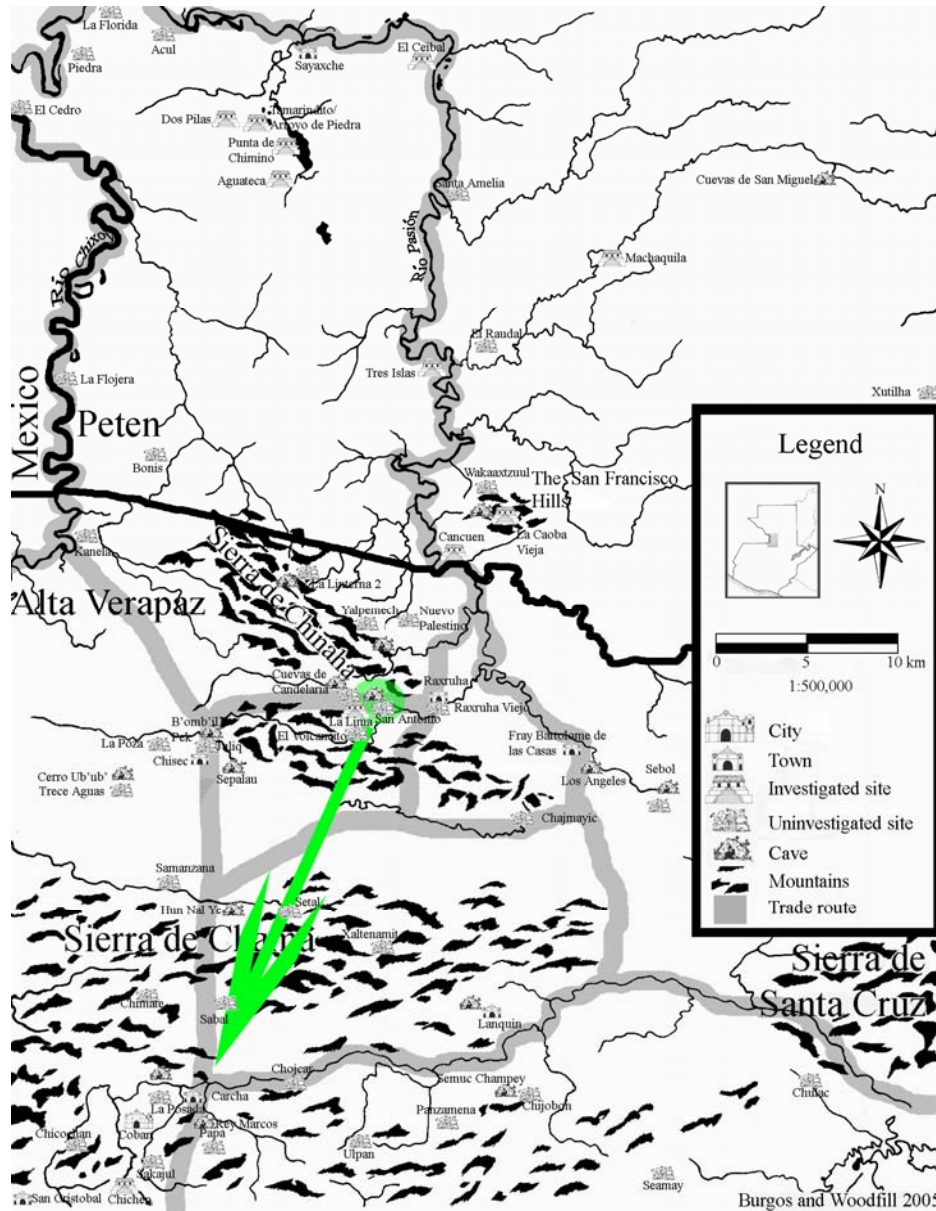


Figure 7- 34: Location of Late Classic Ceramics and their Cultural Affiliations



**Figure 7- 35: Location of Early Postclassic Ceramics and Cultural Affiliations**  
 Some of the results of investigations in the Late Classic are counter-intuitive upon

first examination. Not only does the bulk of recovered Late Classic material come from surface settlements, but the Late Classic material only makes up a small portion of the cave and shrine sample. There are two potential reasons for this—either shrine use decreases as the population increases or new, as of yet undiscovered, shrines dominate

the Late Classic horizon. Regardless of which model is supported by future investigations, this is certainly a period of change.

After the collapse of Cancuen and other sites further down-river, no materials are recovered in the northern half of the region, while the material from the southern half of the river is evenly split between northern highland types and imitations of western Petén sites. Although the K'ot group is obviously an imitation of Fine Orange Ware ceramics, the paste and slip color are so different that the degree of contact is indeterminable. By all accounts, La Lima is still going strong in the Terminal Classic—at least one of their principal buildings was rebuilt during this time period, as evinced by the dedicational cache.

By the Early Postclassic (figure 7-35), even La Lima was abandoned, and only one partial vessel and one sherd from the same cave in the Candelaria system stand as evidence that the region had not been completely forgotten. Once the ritual practitioners left the caves, however, it appears that they were forgotten. While there was a Chol-speaking population in the region at the time of the Spanish conquest (Sapper 1985), they are at present invisible in the archaeological record, and the first evidence of cave use following the Early Postclassic dates to the latter part of the twentieth century.



## CHAPTER VIII:

### RITUALS, RITUAL, AND THE IMPORTANCE OF RITUAL REMAINS

#### **I. Several Problematic Aspects of Ritual Activity**

Ritual was isolated as an analytic category in the nineteenth century (Bell 1993:14), and has been used to construct models of universal human experience. Although most people have an idea about what ritual *is*, it is a difficult concept to define. It is a “symbolic behavior that is socially standardized and repetitive” (Kertzer 1988:9), although many acts not normally considered to be ritual, such as driving a car or jogging, could also fall under this characterization. While most scholars investigating ritual agree that the major difference between ritual and these “ritual-like” behaviors is the role that ritual plays in larger social systems, they often do not agree on what that role is.

Bell (Ibid. 14-16) characterizes ritual studies as belonging to three primary theoretical groups—“myth and ritual” scholars, functionalists, and symbolic anthropologists. Myth and ritual scholars (*e.g.* Tylor 1953, Frazer 1935 [1890], James 1955) examined ritual in the context of religion, as a way to express the fundamental ideas that compose specific religions. Functionalists (*e.g.* Durkheim 1995 [1915], Mauss 1967, Hubert and Mauss 1953, Malinowsky 1984, Radcliffe-Brown 1964 [1922]) examined ritual in the larger context of society, how “ritual activities effectively sacralize things, people, and events” (Bell 1993:15) in order to integrate and consolidate society. Symbolic anthropologists (*e.g.* Turner 1969, 1974; Geertz 1980; Leach 1968; Sahlins

1976) examined ritual as a cultural phenomenon, allowing symbolic and social communication.

In recent years, Rappaport has re-invented the functional approach to ritual,<sup>1</sup> which he feels allows for:

- 1) the sealing of the social contract,
- 2) the establishment of convention,
- 3) the construction of integrated conventional orders . . . ,
- 4) investment of whatever it encodes with morality,
- 5) the construction of time and eternity; [*sic*]
- 6) the representation of a paradigm of creation,
- 7) the generation of the concept of the sacred and the sanctification of conventional order,
- 8) the generation of theories of the occult,
- 9) the evocation of numinous<sup>2</sup> experience,
- 10) the awareness of the divine,
- 11) the grasp of the holy, and
- 12) the construction of orders of meaning transcending the semantic (Rappaport 1999: 27, original in italics, numbered list added here).

Like earlier approaches, ritual serves to create and maintain the social order; unlike other “functionalist” scholars, he views ritual and religion as an essential part of the construction of not only society but of humanity.

### *Ritual and Shamanism*

Another primary way ritual has been understood is through the lens of shamanism. Shamanism is a widely used, widely discussed, and widely misunderstood concept, and no single definition spans all of the different ways it is envisioned. It was most classically defined as a “technique of ecstasy” by Mircea Eliade (1964), emphasizing the trance state that Siberian shamans (from whom the word “shaman” is

---

<sup>1</sup> While he denies that his approach is functionalist (Rappaport 1999 :27-8), the major problem he has with this characterization is an association with a specific type of functionalism—ecological functionalism—and not necessarily with “functionalism” as defined by Bell.

<sup>2</sup> “religion’s non-discursive, affective, ineffable qualities” (Rappaport 1999:23).

derived) acquire during ceremonies. Lessa and Vogt (1972:301) significantly modified the emphasis (if not the content) of the idea: “a ‘shaman’ is a ceremonial practitioner whose power comes from direct contact with the supernatural, by divine stroke, rather than from inheritance or memorized ritual.” Many shamans channel or communicate with spirits to affect sickness, malaise, or other problems in the human realm. Many other scholars include the idea of a “wounded healer” (e.g. Halifax 1982, J. Townsend 1997:457)—not only do shamans often work as curers, but, in many cultures, becoming a shaman involves sickness, dismemberment, death, or generally severe trauma.

In recent years there has been a wave of criticisms regarding the use of the term “shamanism,” one that is most typified by several articles in a recently edited volume (Bahn 2001, Solomon 2001, Klein *et al* 2001). The primary critique is that the very term has been expanded so far from its original meaning to have lost any utility, and the defining characteristics “trance” and “ecstasy” are meaningless and hotly contested outside of the discipline of anthropology. Even Durkheim (1995:22-6) refuted one of the principal characteristics of shamanism long before the term gained recognition, arguing that the concept of “supernatural” itself is suspect, since it assumes that there is a natural, *true* world that all cultures acknowledge equally.

Regardless of the terminology used, even these critiques do not deny that certain members of society gain their identity and social standing from associations with the unseen world. In fact, their arguments show that this and some of the other supposed characteristics of shamanism are actually *more* important than Eliade and his successors would believe. English and French kings could be considered “shamans” under the present definition, for example, since their authority was fundamentally derived from

divine sources and, during several different points in European history, they demonstrated this through “laying hands” on the infirm (Kertzer 1988, Klein *et al.* 2001).

In the Maya world, the Classic *k’uhul ajaw* did devote a large quantity of resources to associations with gods, celestial bodies, grand cycles of time, sacred geography, and other non-mundane concepts and entities, as evinced through palace façades, ceremonial dress, city layout, and reconstructed scenes on ceramic vessels and murals. Obviously, these *k’uhul ajaws* were also concerned with and tied into the human realm, but much of their power stemmed from otherworldly associations. While this has occasionally led to their classification as shaman-kings (Freidel *et al.* 1994, Stross 1994; see Klein *et al.* 2001 for a critique), if any “universalist” terminology is to be used, it would be more beneficial to label them “priest-kings.”<sup>3</sup>

### *Ritual and Power*

Several contemporary scholars (*e.g.* Kertzer 1988; Bell 1992, 1997) have followed the lead of Bourdieu (1977) and other practice theorists (*e.g.*, Ortner 1978, Giddens 1979) to show how ritual is closely tied to power and social hierarchy. According to Kertzer (1988:104), for example, ritual is a principal way to make claims to power and to send messages to the public. Political systems tend to exploit pre-existing ritual and symbols, accumulating them and using them to increase their own power (Ibid. 43). In Hawaii, for example, the rulers and gods were associated with the same symbols and adornments (Ibid. 43) and were the only members of the community with access to the god houses (Ibid. 44). In this setting, the ritual serves the dual function of associating the rulers to the gods and restricting access to the gods to the rulers. In addition, Kertzer

---

<sup>3</sup> For a counter-argument on the use of shamanism in Maya archaeology, see Prufer 2005:188-90.

notes that ritual limits discourse—it is a way for people to highlight certain images while obscuring others (Ibid. 85)

Catherine Bell (1992, 1997), in her two surveys of ritual activity, has avoided defining ritual, but has instead shown what ritual *does*; fundamentally, it constructs “relationships of authority and submission” (Bell 1997:82). Rituals “depict a group as a coherent and ordered community based on shared values and goals” (Bell 1997:129) and “demonstrate the legitimacy of these values and goals by establishing their iconicity with the perceived values and order of the cosmos” (Ibid.), both of which fundamentally serve to naturalize the system (Ibid.). Bell (Ibid. 139-64) isolates four essential ritual elements that can be used to characterize ritual and ritual-like activities:

- 1) formalism—a restriction on how one can act and speak, which tends to create a hierarchical relationship between ritual practitioner(s) and audience.
- 2) traditionalism—direct or indirect ties are made to the past in order to link the present ritual event to older, more established social orders.
- 3) rule-governance—rituals and ritual-like activities (war, sports) are set apart from daily life by strict adherence to rules, in order to negate “the chaos of personal self-interest” (Ibid. 153).
- 4) sacral symbolism—direct or indirect appeal to the sacred.<sup>4</sup>
- 5) performance—most ritual activity is multi-sensory, framed in order to separate it from the quotidian, and involves an audience.

With regards to the function and density of ritual within particular societies, Bell divides ritual activity into four distinct “styles” (Bell 1997:185-91) based on an earlier

---

<sup>4</sup> Bell uses the term sacred in the same sense as Durkheim (1995), something that is set apart from the outside world through ritual and treated deferentially. This does not have to be part of a religious system *per se*, although it often is.

study (Douglas 1973). Each of these styles is an ideal type that can be used to describe different ritual schemas:

- 1) *Appease and appeal*—the construction of relationships with the supernatural world through gift-giving (see also Durkheim 1995:36, Mauss 1967, Godelier 1999, Monaghan 1995, Spenard 2006) for a desired end, *e.g.*, protection, luck, or a good harvest.
- 2) *cosmic ordering*—associating the social system with the natural world, in effect naturalizing the political system. In societies like the Classic Maya, the ruler reinforces his place at the top of the hierarchy through associating himself with the divine world, often through elaborate pageantry. This type of ritual also serves to create “redemptive hegemony” (Bell 1992:83), in which the hierarchy becomes so ingrained that citizens work to find and maintain their “place” in society.
- 3) *moral redemption*—ritual is of less importance than in the previous styles and largely consists of the reaffirmation of a specific morality, such as Protestant church services.
- 4) *personal spirituality*—an emphasis on private ritual and an individual quest for understanding the universe.

Power relations and hierarchy are the fundamental basis of ritual according to Bell, although her thesis becomes problematic when examining these different styles. While cosmic ordering and moral redemption create a hierarchy between audience and practitioner, at least within the context of the ritual event, this is not necessarily the case for the other two systems.

Social hierarchy between the audience and practitioner becomes more problematic in the other two types of ritual activity, as does the notion of the audience. Jennings (1982) characterizes ritual as a display to an observer or observers, acknowledging that the principal observer is often a deity or supernatural being. The primary audience in the “appease and appeal” style and the *only* audience in many of the “personal spiritual rituals” is such a being. This audience member is established as dominant within the context of the ritual. In these two examples, there *might* be the reification of social hierarchy in the ritual event—a ritual specialist with restricted access to divine knowledge or a spiritual “guide” in a New Age workshop—but any relation between ritual and social structure is highly abstract, if not entirely abstract.

#### *Problematic aspects of Ritual Assemblages in Archaeology*

As a set of behaviors, relationships, and symbols, ritual is difficult to approach from an archaeological standpoint. With luck, archaeologists are left with fragmentary remains of ritual activity—a few burnt potsherds, an obsidian blade, a carved Pacific shell—from which patterns of action and belief must be reconstructed. Time and human activity mixes, decomposes, and scatters much of this evidence, however, leaving a highly limited and problematic archaeological record.

Recently, Timothy Insoll (2004) created a paradigm for the archaeological investigation of sacred places. While ritual was addressed, it was not treated as an independent phenomenon but as one of the eight principal characteristics of a shrine (Ibid. 148-50):

- 1) visibility—the shrines are “undeniably altered by human interaction” (Ibid. 148).
- 2) definition—the concept of shrine lacks clarity as the sacrality is not contained within a specific object. The shrine could be an altar, formation, monument, or stage; an entire cave or hill; or the surrounding forest.
- 3) myth—mythology permeates sacred sites.
- 4) ritual—repetitive action incorporating movement, noise, sensory alteration, and emotional stimulation.
- 5) time—scholars must consider different “layers” of time—“long-term, . . . enduring sacrality; medium-term . . . changing ritual action and custodianship; [and short-term,] individual visits” (Ibid. 149).
- 6) syncretism/identity—shrines do not necessarily belong to one religious tradition, even if under the custodianship of one particular group.
- 7) belief, emotion, experience—the motives for an individual conducting the ritual and the accompanying experience of the ritual activity.
- 8) numinous—the holiness of shrines is present on both the social and individual level.

While all of these are important aspects of sacred places, the fundamental weakness of applying this paradigm to the archaeological record is, ironically, that the archaeologist who created it was relying on an ethnographic study to create it and does not relate it to an archaeological context. Not all of these factors are accessible in the archaeological record, and several are primarily identified only through historical or ethnographic data. Insoll does allude to this weakness, however, suggesting that the function of ethnographic



analogy is as an “aid to the interpretive imagination” (Insoll 2004:115), suggesting the complexity of the remains and the past processes that created them.

As an Islamist archaeologist, Insoll has the advantage of historical documents and a higher degree of religious and ritual continuity than is present in the Maya world. Ethnohistory and archaeology have proven valuable in order to create behavioral models to test against the available archaeological data (*e.g.* Gann and J.E.S. Thompson 1931; de Borhegyi 1963; J.E.S. Thompson 1970, 1975; Hammond 1972a, 1991; R. Adams 1978; Brady 1989; Arnauld 1990; Demarest 1992; García-Zambrano 1994; Freidel *et al.* 1994; Prufer 2002; A. Adams and Brady 2005; Brady and Prufer 2005; Vogt and Stuart 2005), but the lack of detailed ancient texts discussing ritual activity and the social and cultural changes that have occurred in the 1000 years since the Classic Maya collapse preclude direct correlation to the artifactual assemblage. Ethnographic and ethnohistoric comparisons have, however, proven to be highly useful, especially in the interpretation of cave remains.

## **II. Problematic Aspects of Ritual in Maya Archaeology**

### *Early Maya Archaeology*

Until the 1960s, Classic Maya society was conceived of as largely egalitarian (*e.g.* Morley 1946, Gann and J.E.S. Thompson 1931), and pyramids and palaces composed not the core of the cities but their totality. These “ceremonial centers” were inhabited by priests who worshipped and adored the gods. They were supported by the villagers throughout the countryside, who provided food, labor, and (presumably) fresh blood to repopulate them when needed. This approach was based on several interrelated threads.

Early ethnographies (Redfield and Villa Rojas 1934, Vogt 1964b) reported a general lack of social stratification in contemporary Maya communities, and epigraphers and iconographers interpreted the codices (Förstemann 1896, 1898; Schellhas 1897) and monuments (*e.g.* Palacios 1936, J.E.S. Thompson 1952) as records of worship and devotion. Since the modern Maya practiced milpa (“slash and burn”) agriculture, it was assumed that more intensive agricultural techniques had never been developed (Morley 1946). The lack of perceived urban areas, social stratigraphy, and intensive agriculture indicated that the Maya could not have lived in cities.

Some work contradicted this, like the settlement survey at Uaxactun (Ricketson and Ricketson 1937), which provided convincing evidence that the Classic Maya cities were densely occupied far from their cores, although this was not fully incorporated by the discipline until the University of Pennsylvania project at Tikal (*c.f.* Carr and Hazard 1961, W. Coe and Haviland 1982). The Tikal project revolutionized our understanding of Maya settlement patterns and social organization—after the peripheral survey in the early 1960s (Puleston 1983) it was no longer tenable to view Maya sites as anything other than cities, which require a much higher degree of social stratification and organization. At roughly the same time, Tatiana Proskouriakoff (1960) published “Historical Implications of a Pattern of Dates at Piedras Negras,” providing convincing evidence that many of the personages in the monuments were historical beings, and the glyphic texts accompanying them discuss actual political events.

In the traditional, pre-Pennsylvania paradigm, ritual was largely conceived of as a way to construct a relationship between the human and divine realms. In the late 1960s,

however, ritual was relegated to a secondary importance<sup>5</sup> for the discipline as archaeologists (*e.g.* Puleston 1968, A. Ledyard Smith and Willey 1969, Siemens and Puleston 1972, Sanders 1962, Rathje and Sabloff 1973) and epigraphers (*e.g.* Satterthwaite and Ralph 1960, Satterthwaite 1965) began to explore the ramifications of Proskououriakoff and the Pennsylvania team's discoveries and how they relate to settlement patterns, historical processes, agriculture, economies, and other aspects of ancient life. This focus on "material" topics over ritual and religion matched well with general trends in the discipline, as the archaeology of the 1960s and 1970s reinvented itself as an overtly scientific discipline (Binford 1962, 1964; Watson *et al.* 1971, Sabloff 1990). When ritual was examined (*c.f.* MacLeod and Puleston 1978, Kubler 1974, Lounsbury 1978), it was often as a peripheral phenomenon.

### *Ritual in Iconography*

Royal ritual became a central focus in iconography during the 1980s as scholars began to appreciate the relationship between ritual and elite power. The act of bloodletting, which had been discussed by de Landa (1978) and others shortly after the Spanish conquest (*e.g.* Sahagun 1969, vol. 1:316), began to take on a much larger importance in our understanding of the Maya. Blood and the act of autosacrifice became a direct link to the ancestors, especially elite ancestors, for Stuart (1984:16), who went so far as to argue that the "vision serpent"<sup>6</sup> associated with much kingly ritual was, in fact, composed of blood, tying blood, the ancestors, and the autosacrifice itself into a single symbol.

---

<sup>5</sup> , The earlier "priest" model did continue to be expounded for several more years (*e.g.* JES Thompson 1970), however.

<sup>6</sup> later determined to be a centipede (Taube 2003)

The iconographic record proved invaluable to much of the basic understanding of the ritual and symbolic nature of Maya power. Most of the depictions of *k'uhul ajaws* showed them in elaborate ceremonial regalia, covered in images of gods and other sacred beings. They are often shown dancing, capturing prisoners, or involved in myriad ritual activities. Unfortunately, very few ritual assemblages were examined as such, at least until new areas of inquiry were established, especially contemporary cave archaeology (see below).<sup>7</sup>

### *Unifying Concepts of Maya Ritual*

At the same time that iconography was beginning to appreciate the fundamental nature of ritual in the maintenance of social inequality and the legitimation of elite power, archaeologists re-introduced ritual into their paradigm as well. The “theater state” model of Classic Maya society was originally proposed by Demarest (1984, 1992) and picked up by Hammond (1991) and others (*e.g.* Sharer 1993, Inomata 2006), based on applying Tambiah (1977) and Geertz’ (1980) largely ethnohistoric work on nineteenth century Java.<sup>8</sup> Its proponents proposed that the Maya elites, like those in Oceania, acquired power and status through a combination of heredity, individual charisma, and ritual. The ritual served to reify the political power structure, largely through staging elaborate displays that reinforced their perceived role as intermediaries between the human and divine realm.

---

<sup>7</sup> Ritual is still a central focus of the interpretation of the Postclassic codices—the Madrid codex, for example, is an almanac of the most fortuitous days for hunting (von Nagy 1997; G. Viel 1997; Bricker 1997a) and astronomical rituals (Bricker 1997b). The Dresden codex, similarly, is concerned with agricultural and other astronomical rituals (Colas pers. comm. 2007).

<sup>8</sup> A specific type of theater state model was applied, that of the “galactic polity,” which focused on the inherent instability of the system and the “pulsating” size of the different polities through alliances and conquest.

In her work *Living with the Ancestors*, Patricia McAnany (1995) argued that much of the “theatricality” and ritual used by the elites was simply “the household writ large,” and that the temple-pyramids and rituals related to deceased rulers were simply a long-standing ancestor veneration cult elevated to a state level, one which created a group identity. Other, more recent studies (Inomata 2006, Houston 2006) are directly trying to address the nature of the performance involved in the Maya “theater-state.”

### III. Ritual and Caves<sup>9</sup>

#### *Early Cave Investigations*

During the early colonial period, Diego de Landa (1978) noted that the Maya used caves for a variety of ritual activities, an observation that was echoed by others in the following centuries (*e.g.* Fuentes y Guzman 1957, Stephens 1993, Gage 1958). The first report on archaeological investigations in cave in the Maya world was written by Henry Mercer (1975 [1896]) at the end of the nineteenth century. *The Hill Caves of Yucatan* detailed the author’s attempt to find evidence of Paleolithic inhabitants of the northern lowlands. While he never overtly postulated a function for the caves, detailed excavation and artifact analysis allowed him to discuss the cave assemblage in relation to the surrounding Maya settlements. In concluding his excavations in Cave of Loltun, for example, he states:

A people generally identical with the builders of the ruins had come to the cave. Reaching the region in geologically modern times, and always associated with still existing animals, they had not developed their culture there, but had brought it with them. No human visitor had preceded them (Mercer 1975:124).

---

<sup>9</sup> For a more complete history of Maya cave archaeology, readers are directed to Brady and Prufer (2005) and Scott (n.d.).

Several other caves reports soon followed. E. H. Thompson (1897) focused exclusively on Loltun, and assumed a primarily “domestic” use for the cave, a position that contradicted Mercer’s discussion of “visitors” and not residents.<sup>10</sup> Gordon (1898) and Seler (2003 [1901]), working in opposite ends of the Maya highlands, began to explore the ritual nature of caves. While Seler was ambivalent about the ultimate function of caves, Gordon continued to believe that caves were also used for habitation.

This ambivalence about the nature of cave use was replicated for the next 80 years (Joyce *et al.* 1928; Joyce 1929; Andrews IV 1961, 1965; Pendergast 1964, 1969, 1971, 1974). In 1959, J.E.S. Thompson published “The Role of Caves in Maya Culture,” in which he posited that caves were fundamentally ritual places. Since it was written for a German museum publication with little circulation outside of Central Europe, however, the publication had little impact on the field. A modified version of the paper was published shortly before his death (J.E.S. Thompson 1975), but again was mostly overlooked.

Following Thompson’s work, Patricia Carot (1976, 1982, 1987, 1989) investigated the Candelaria system and other neighboring caves, and interpreted the remains as evidence of a variety of ritual activities. She also attempted to identify associated settlements, the residents of which would have been responsible for the ritual activity she documented.<sup>11</sup> MacLeod and Puleston (1978), on the other hand, examined cave ritual largely through a survey of the extant archaeological and ethnohistoric

---

<sup>10</sup> Vestiges of this postulation are still occasionally found in the literature, most notably in a recent chapter in an edited volume (Varela Torrecilla and Bonor Villarejo 2003). The authors use Loltun as an example of a primarily domestic cave that they contrast to Naj Tunich, a cave that they admit has a nearly identical morphology and environment but that is exclusively ritual in nature. This dichotomy is related to the history of interpretation and not any reflection in the archaeological “reality,” however, and is directly contradicted by the next chapter in the volume (Brady 2003).

<sup>11</sup> Another, slightly later survey of the Candelaria Caves (Pope and Sibberenson 1981), assumed that the material remains were evidence of habitation, however.

literature and some experimentation with sensory deprivation. Like Thompson, however, these publications had little impact in Maya archaeology, and in the early 1980s, one scholar admitted “[w]hether residence in caves was permanent, periodic or sporadic, regular or only for ritual and refuge, we do not yet know” (Hammond 1981:177, quoted in Scott n.d.).

*Naj Tunich and the Founding of Maya Cave Archaeology*

In 1981, James Brady (1982, 1989; see also Stone 1995) began a long-term, systematic study of a single cave. Unlike earlier cave investigations, it combined intensive field research, laboratory analysis, and a comprehensive survey of extant cave literature. Thompson’s synthetic works on the functions of caves provided the base for much of Brady’s research, but for the first time the research provided conclusive evidence that caves were a central part of Maya cosmivision, and not part of a peripheral phenomenon.

Brady also provided a convincing paradigm to understand the distribution of “ceremonial” and “utilitarian” remains in caves. The cave interior contained mostly unslipped ceramics, although their association with art and hieroglyphic texts detailing ritual activities prohibited interpreting them as evidence of cave habitation. Most of the polychrome ceramics were restricted to natural “stages” near the cave entrance. Based on this pattern, he argued that two different types of ritual were being performed in the cave—public and private (Brady 1989:404-7).

Two regional archaeological cave projects were soon founded. Juan Luís Bonor conducted a survey of caves in the municipality of Oxkutzcab, Yucatan, Mexico (Bonor

1987, Bonor and Sanchez y Pinto 1991). A second survey, the Western Belize Regional Cave Project (c.f. Moyes 2000, 2005; Awe *et al.* n.d., 2005), was founded in the 1990s to document ritual activities in caves throughout the Cayo District. Both projects revealed a much higher density of caves than was expected in their respective regions and a wide range of ritual activity and cave modification.

### *The Rise of Regional Cave Surveys*

In the 1990s, investigations by Demarest in the Petexbatun region uncovered a series of caves that appeared to be closely tied into the layout of several of the sites; after several accident-ridden reconnaissance trips in the caves, Brady was brought in to perform a comprehensive investigation. While his previous research in Naj Tunich had been able to identify specific ritual events, the Petexbatun Archaeological Cave Survey was able to show how ritual spaces were appropriated and used by the elites to legitimate their power (Brady, Scott, *et al.* 1997). For the first time, caves were systematically tied to settlement patterns and were shown to have directly influenced the layout of major cities.

A series of regional cave surveys appeared after the Petexbatun project ended in the mid-1990s. Most of the new generation (c.f. Prufer 2002, Rissolo 2003, Peterson 2006, Spenard 2006) are working in a similar capacity as Brady in the Petexbatun—cave subprojects in a larger investigation. Although each explicitly relates the caves to settlements, several distinct patterns have been found. Prufer (2002) studied caves in immediate proximity to two communities on opposite ends of a valley in the Maya Mountains. Caves used by elites in the Yalahau region of Quintana Roo (Rissolo 2003)



were not necessarily associated with settlements, however, but were instead chosen primarily for their size. In the Xibun region of Belize, only one cave investigated by Peterson (2006), Actun Chanona, was directly incorporated by a nearby settlement; the rest were located some distance from population centers.

Before the establishment of the sub-discipline of cave archaeology, most cave investigations (*e.g.* Mercer 1975; E. H. Thompson 1897; Joyce *et al.* 1928; Joyce 1929; Tozzer 1957:198, Pope and Sibberenson 1981, Walters 1988, Ball and Ladd 1992;192) examined artifacts recovered from caves as a single assemblage, regardless of the specific context of any particular artifact. As a result, very general conclusions could be reached about ancient Maya cave use. Brady and Peterson (n.d.) have recently shown that the function of any object in a cave setting can only be determined through context and evidence of use—most unslipped jars, for example, were formerly correlated to a “domestic” setting. This simple, universalist designation is problematic when considering that many of these vessels are coated with what appears to be copal residue on their interiors (Brady 1989:213; Brady, Veni, *et al.* 1992:77; Reents-Budet and MacLeod n.d.; Prufer 2002:193; Woodfill, Ramírez, *et al.* 2004; Peterson 2006:65; Brady and Peterson n.d.). This is, of course, equally true on the surface—an obsidian blade found in a sub-stela cache should be interpreted differently than one found in a midden, even if they are otherwise identical. The fundamental difference here is that there are no identifiable middens in cave assemblages; all artifacts are found in original contexts which need to be understood to interpret their function.<sup>12</sup>

---

<sup>12</sup> One must take into account, however, the “jumbling” of specific contexts through human action such as looting, water action, and gravity.

Fundamentally, recent investigations have provided a much more nuanced and complete picture of ancient Maya cave use through a close examination of context. Caves are understood within specific geographical and political contexts instead of as generic space and ancient behavior is reconstructed by examining the specific location of an artifact within the cave and tying it to associated materials and evidence of use.

#### **IV. Varied Aspects of Ritual in the Pasión-Verapaz Region**

##### *Architectural Incorporation*

In the 1970s, Vogt (1976, 1981) identified an apparent binary opposition between mountains and caves in the Maya landscape, arguing that both were equal but distinct ritual features. Several decades later, Michael Coe (1988) suggested that the tombs found in temples were artificial representations of the Underworld. In 1997, James Brady suggested that hill and caves are intimately related and create a symbolic center to Maya sites.<sup>13</sup> Several years later, Barriéntos and Demarest (2000:322) suggested that residents of Cancuen used the hill-caves visible from the site epicenter in place of pyramids, which were conspicuously absent from the site.

Caves were often incorporated into settlements throughout the Maya region (ibid; Seler 2003; E.H. Thompson 1938; A.L. Smith 1955; García Cruz 1991; Brady and Veni 1992; Brady 1997, 2003) and Mexican highlands (Heyden 1975, Mendoza 1977, Manzanilla *et al.* 1996, R. Townsend 1992). Much of the incorporation of sacred landscape is elite in nature—at nearly every site in the Maya world the highest-status residences are found on the highest elevations, for example. In addition, palaces are

---

<sup>13</sup> This idea of cave as center was also reported by Fischer (2001:153-5) among the modern highland Maya.

often constructed above caves or cave-like features (Brady, Scott *et al.* 1997; Prufer and Kindon 2005; Barriéntos, in prep.).<sup>14</sup>

Residents of Raxruha Viejo (O'Mansky 2003; Woodfill, Fahsen, and Monterroso 2005), for example, ostentatiously incorporated natural *witzob'* (hills) into their urban design. Each of the palaces is built upon a hill, and upon the front of the largest hill at the site<sup>15</sup> they built a large stepped platform lined with several stelae and altars. In addition, three separate caves open out onto or near the central plaza, and, while heavily looted and vandalized, all contain a large number of sherds dating to the Late Classic *apogee* of the site (see chapter seven). Hills and caves were similarly incorporated into the layout of La Lima, although on a much smaller scale.

At Cancuen, however, the entire area surrounding the site is a large, fluvial plain (Instituto Geográfico Nacional 1978), and from talking to the residents of nearby villages, it appears that any caves that might exist in the vicinity would be buried by several meters of soil. Several "cave-like" natural features<sup>16</sup> were co-opted by residents of the site, however, including the construction of a small pool that collected water from a spring beneath the palace. Associating springs with elite architecture is a pattern noted at Dos Pilas (Brady, Scott *et al.* 1997:), Palenque (French 2002, quoted in Prufer and Kindon 2006), and, most explicitly, Muklebal Tzul (Prufer and Kindon 2005), where water from a small spring located under a palace structure was channeled through an artificial cave to the corner of the building, where it was collected in a small pool.

---

<sup>14</sup> This was not an exclusively elite phenomenon, however, as Brady, Scott, *et al.* (1997:354) also noticed small fissures used for ritual activity associated with most residential groups in Dos Pilas.

<sup>15</sup> Visible throughout much of the region

<sup>16</sup> Which appear to have been referred to by the same term as caves (*ch'een*) by the ancient Maya (Stuart 1999).

The associations between buildings and the sacred geography existed on an additional level for the Maya as well. J.E.S. Thompson (1975) noted that the colonial Yucatek gloss for *actun* was either cave or building, and Stuart and Houston (1994) reported that most ancient Maya structures were conceptually linked to hills. The Maya occasionally decorated building façades with earth monsters (Schavelzon 1980, Gendrop 1980, Benson 1985), especially temples. In the 1960s, Evon Vogt proposed a model of Maya temple use that was based on contemporary mountain-top rituals by the highland Maya (Vogt 1964b), a hypothesis that was validated when Stuart (1997, Vogt and Stuart 2005) translated the glyph for temple as *witz*, or mountain. Not only were temples and other elite structures physically associated with hills and caves, but temples were themselves conceived of as artificial hill-caves. This association was so strong that an at least occasional idiom for “city” in the Maya glyphs was *chan ch’een*, “sky-cave” (Martin 2001:178, quoted in Prufer and Brady 2005)—the human community, the cave, and the heavens together form a single entity.

The conclusion to be drawn from this pattern is commonly expounded (Brady and Veni 1992; Brady, Scott *et al.* 1997; Brady and Ashmore 1999; Brady 1997, 2003; Prufer and Kindon 2005; Pugh 2005; Woodfill *et al.* 2006) but worth emphasizing again—while the Maya elites often performed ritual in caves (Brady 1989, Stone 1995, Prufer 1999, Rissolo 2003, Prufer *et al.* 2003), they actively co-opted these important ritual spaces through architecture and site layout. Elite power, fundamentally, was based on associations with otherworldly beings and places, and co-opting symbols and aspects of the sacred landscape was a way of anchoring this power in something visible. The

landscape has become part of the symbolic system exploited by the local elites in order to maintain their power (Kertzer 1988).

### *Associations with Water*

Water is an especially sacred part of the landscape that played a prominent role in ritual space. According to colonial sources (*e.g.* de Landa 1978), throwing objects into ponds, cenotes, and other bodies of standing water was a common way of offering them to the gods (Folan 1974, Mata Amado 1974, Coggins and Shane 1984, Brady 1989, Lucero 1999, Brady and Ashmore 1999).

In addition, water collected in caves and related features, *suhuy ha'* (virgin water), was noted by the Spaniards as important in ritual events (de Landa 1978). This has led a wide range of scholars (*e.g.*, J.E.S. Thompson 1975; Bonor 1989:41-6; Woodfill 1999, 2002) to interpret whole vessels left underneath active drips as receptacles for collecting this sacred water. While this might certainly be the case, one is left to wonder why the vessels were left in the cave—many in the region date to the Early Classic while the population persisted in the region for the following 300 years. While they might have been continuously exploited, forgotten about, or simply left behind when the owner died, the vessels might have served another purpose. In addition, Brady (1989:37) notes that many of the broken vessels located in areas of active dripping could not have been used for collection of *suhuy ha*, since they appear to have been burnt or broken before being left behind.

Brady (1989:144-6) reported what appeared to have been an artificially constructed pool in Naj Tunich that he posited was used in order to leave offerings.

During the Terminal Preclassic, dirt, rocks, and broken formations were piled on the down-slope side of a natural drainage, and ceramics, burnt bone, an obsidian blade, and shell were apparently thrown into the pool from above. In addition, many sherds and other offerings in the cave were left in nooks and under dripping formations (Ibid:36-7).

Almost all of the ceramic vessels in the Verapaz-Pasión region were left in wet places. While many of the ceramic vessels were at least partially filled with water and/or calcium carbonate, some were not. A series of empty vessels placed at an angle or on their side was found in Hun Nal Ye. They were found along a slope leading towards the stone box and placed in such a way that one needed to move with extreme precaution to not crush them (and, indeed, the looters who raided the cave in late 2005 destroyed at least one of them). All were placed in travertine pools and one had two intentional “kill holes” on opposite sides of the vessel’s “belly.” This was the only vessel in Hun Nal Ye with any evidence of a kill hole and they were placed in such a way as to make them very obvious, since the first hole was at the vessel’s highest point as it was sitting. More whole ceramic vessels (nearly 20) were recovered from the pool in front of Hun Nal Ye. While several have patches of calcium carbonate that could only have been deposited in the open air, indicating that they fell into the pool after they had been deposited, it is likely that many of them were thrown into the pool as offerings.

In addition to ceramic vessels, most of the human remains were found in wet parts of various caves. In La Iluminada (CND-203), which contains an untold number of individuals, only one of them was placed in a dry natural “crypt;” the rest were found in wet parts of the cave. The same pattern is found in other caves in the region—both of the burials found in Hun Nal Ye were in wet areas—a primary burial in a travertine pool and

a secondary burial in a small natural basin filled with calcium carbonate (Woodfill Ramírez, *et al.* 2004). Part of a juvenile pelvis was found inside a whole vessel that had been buried under a dripping formation (Woodfill and Monterroso 2007). This corroborates a pattern noted by several other authors, who suggest that skeletons found in similar contexts in Actun Tunichil Muknal (Awe *et al.* n.d.) and the Cueva de Sangre (Scott and Brady 2005:278) are sacrificial offerings.

Even the stone box in Hun Nal Ye was found in a wet area (figure 8-1).<sup>17</sup> A small amount of calcium carbonate had accumulated on the top and sides of the box and two of its feet had been cemented to the cave floor. It was lidded, and while it did contain a calcified femur from the nearby tapir skeleton, the bone had been calcified before it was placed in the box.



**Figure 8- 1: The Stone Box from Hun Nal Ye**

---

<sup>17</sup> And the fact that the primary motif on the vessel's lid is the moon might make a case for Ix Chel being the ultimate recipient of the offering.

Could it be that the jars commonly interpreted as receptacles for *suhuy ha'* were, in fact, part of the same phenomenon as the other objects? What if they were the offerings, or if the water that accumulated inside of them housed the offerings, much like in Naj Tunich (Brady 1989)? No residue analysis or testing for copal resin has been conducted on samples collected in the interiors of these vessels, so this question must be answered in future investigations.

Water was important in several other ways. Many of the principal areas of use in the Candelaria Caves have a thick layer of “watery” material at their base—a mixture of *jute* shells, crab claws, and bivalves, which appear to be a local variation of the *jute* caches found throughout the Maya world (Pendergast 1969:58, MacLeod and Puleston 1978, Brady 1989:378, Halperin *et al.* 2003). Coral, marine shell, and carved jade shells were found in caches below the stelae at Tres Islas as well (Tomasic and Quintanilla 2004, Tomasic *et al.* 2005, E. Barrios 2006), firmly anchoring the ritual in the two areas to otherworldly associations.

Finally, the areas with the heaviest use in the caves are areas where there is running or dripping water, and the most intensely used cave segment in the region is the down-river entrance to Verónica, which is where the river flows out of the ground for the first time. Such areas are sacred throughout Latin America (Brady 1989; Morinas and Crumrine 1991:5; Silverman 1994:3; Lucero 1999, 2002; Woodfill, Fahsen, and Monterroso 2006), and rituals there would likely have had the greatest significance.



### *Ritual Movement*

Insoll (2004) suggests that movement be considered when examining a sacred site, as it is an important part of ritual experience. While a relatively opaque phenomenon in an archaeological context, movement can be reconstructed in several contexts.

Labyrinths are a rare but present architectural feature in the Yucatan and the Usumacinta, consisting of a series of tunnels at the base of the building that lead to a staircase or series of staircases that end at an “observatory” or other high point. Suhler *et al.* (1998) have made a convincing argument that these buildings were used to recreate the path of the sun and other celestial bodies by elites, one that would likely have been performed with an audience seeing the practitioner enter below, in the Underworld, and appear above, in the heavens.

While it originally appeared that this phenomenon was restricted to the Late Classic, Brady (2005b) identified several “architectural caves” that potentially date to the Late Preclassic at Sabalam. Although much less elaborate than their later counterparts, the “caves” were constructed to intentionally keep the majority of the tunnels completely dark. In spite of their similarity, these caves do not appear to have functioned in the same way, since they are missing the final, upper “stage” from which the ritual practitioner would emerge.

In the present region, one cave in the San Francisco Hills appears to more closely replicate the Late Classic labyrinth, although the use seems to have been limited to the Early Classic (Woodfill, Miller, *et al.* 2003). The cave consists of two primary sections, a long, narrow labyrinth with several bifurcations and a large chamber accessible only

through the labyrinth that opens onto a twenty meter cliff above the valley floor. The majority of the ritual activity in the cave occurred in this chamber (referred to as “the Sherd Room”). A large quantity of polychrome, monochrome, and unslipped ceramics were found in the Sherd Room along with obsidian blades and a shell gorget (see Appendix A), all of which seem to date to the Early Classic. A small amount of contemporaneous sherds, all unslipped and undecorated, were found scattered throughout the labyrinth, but *only* along the passages that led directly to the Sherd Room.

The movement of an individual or group of individuals through the labyrinth could have directly imitated both the sun and the ritual practitioners theorized by Suhler *et al* (1998)—after traversing a restricted, completely dark cave, (s)he would have been able to perform a ritual upon a high natural stage visible from the valley floor.<sup>18</sup> The importance of this ritual activity is demonstrated through both the quantity of archaeological material present in the Sherd Room (since this chamber has one of the largest artifactual assemblages in the San Francisco Hills) and the energy expended on terminating the cave through the construction of an actual masonry wall.

Several other types of ritual circuits have been discussed in recent years, most notably by Moyes (2000, 2005) and Rissolo (2003, 2005). Moyes’ work in Actun Tunichil Muknal identified a ritual circuit represented by clusters of artifacts in the four cardinal directions and centered on a three-stone hearth made of broken formations. The circuit, like many modern foundation rituals (García-Zambrano 1994:220 figure 3, quoted

---

<sup>18</sup> Interestingly, the Q’eqchi’ who showed me the cave refer to it as the “starry cave,” because of the presence of star-shaped fossils that are visible throughout the labyrinth. If the ancient Maya made the same connection it would have made the experience more powerful for anyone traversing the labyrinth, making a visible connection between the night-time journey of the sun and the ritual movement through the cave.

in Moyes 2005:291), had several other artifact clusters that appear to have served as boundary markers. These seem to relate to the inter-cardinal points and areas where the chamber is restricted.

Rissolo (2003, 2005) has noted that much of the rock art and architectural modifications in caves in the Yalahau region appear to have been made to help channel traffic towards water. This is especially apparent in Actun Toh and Pak Ch'en (Rissolo 2005:362-3)—staircases were built to allow access into the cave interior, and further staircases and landings (in the case of the former) facilitated movement to interior pools. The ultimate destination of the visitor was indicated through a series of “watery” imagery, including rain gods and vulvas, in both caves.

In the Candelaria system there are several similar ritual paths. On the up-river side of Verónica (Ventana de Seguridad, CND-103), a series of hand- and foot-holds were carved into travertine dams descending from an area in which several “U-shaped altars” (Carot 1989) were present on the floor and a series of walls were constructed on a platform above them. A low point along the river, a wide open area for potential onlookers, and a high ritual stage create a “scene” reminiscent of Kaaminaq So'tz.

Approximately 400 meters inside the down-river entrance to Verónica (CND-202), a lined stone path crosses the Río Candelaria at an exceptionally low point and leads to a large, dry area above the river that is only accessible during the dry season.<sup>19</sup> Unlike the chamber in Actun Tunichil Muknal, there does not seem to be an over-arching pattern to the artifact distribution, which is more oriented toward specific cave formations.

---

<sup>19</sup> While the water level is only several centimeters above the stone path during the dry season, the water level rises several meters after the rains come and the current becomes highly unmanageable.

Instead of leading to water (as was the case for Rissolo), at least two of the three pathways described in this section lead to areas of heavy ritual activity.<sup>20</sup> Water does, of course, factor into the overall experience, as the Río Candelaria is a beginning- or mid-point for the two circuits in the Candelaria system. In addition, all three of the end-points—the Sherd Room in Kaaminaq So'tz (Woodfill, Miller, *et al.* 2003), the upper platform in Ventana de Seguridad (Carot 1989:25), and the inner chamber in Verónica (Woodfill, Ramírez, *et al.* 2004)—have active formations on their farthest edges,<sup>21</sup> which was likely important due to the inevitable associations between this dripping and rain, which was a fundamental aspect of cave ritual (*c.f.* Brady 1989:37, Rissolo 2003, Brady and Peterson n.d.).

### *Myth*

Insoll (2004) posits that mythology is intertwined with important sacred sites. The myths surrounding Classic Maya shrines, especially in the southern lowlands, are normally inaccessible. The Maya did record specific places where important rituals took place—the Calakmul-imposed ruler of Cancuen, for example, performed an important ritual at the Makaanwitz before acceding the throne (Fahsen *et al.* 2001), although the specific ritual and location is unknown. Even though the modern Q'eqchi' inhabitants of the region have reinvented or rediscovered many of the ancient sites and shrines, they have been reinvented or rediscovered as sacred places, and it is dangerous to assume

---

<sup>20</sup> The area initially reported by Carot has been heavily modified by Dreux, so a reconstruction of ritual activity is impossible.

<sup>21</sup> The formation in Kaaminaq So'tz is one of the only formations in the San Francisco Hills that was active throughout the dry season investigations in 2002.

continuity since there is a thousand year gap of ritual activity in the archaeological record.

The intersection of the ancient and modern sense of sacred does appear to be closer than one would expect. Cerro Ub'ub', for example, is a large hill located several kilometers north of Chisec. Shortly after he began to farm it, Don Bex, the present owner of the hill, began to sense that it was sacred, and invited the Q'eqchi' Sacred Site Commission to investigate the location. They agreed, and Don Bex began the process of declaring the site sacred and let the forest grow back. Once word got out that the hill was sacred, people began to sneak onto the hill at night to look for treasures, so Don Bex sent his sons out periodically to chop down brush to give the site the appearance of being in use and to discourage looters. One day, one of his sons tripped over a large rock. Upon examining it, his sons discovered that the rock was covering up a narrow shaft which contained a large cache consisting of a god-head *incensario* and several dozen smaller vessels, including bowls, jars, and lidded ceramic boxes containing obsidian blades.

In the San Francisco Hills, several caves are used for modern rituals, but one cave in particular, La Ventana, is the principal ritual place for four neighboring villages. It also appears to have been one of the most important places for ancient ritual activities, and contains rare ceramic types that have only been identified previously near the Belizean border. In both of these cases, the modern Q'eqchi' were drawn to the caves for reasons that had nothing to do with direct, archaeological knowledge—not a single artifact had been previously identified at Ub'ub' before the cache was discovered. La Ventana is one of thousands of caves in the San Francisco Hills, all of which contain at least some evidence of ritual activity. But the fact that it was central to both modern and

ancient ritual activities and that the sacred nature of Ub'ub' was perceived even though it is surrounded by hundreds of other hills speaks to something beyond chance, to some essential part of the Maya worldview that has not changed in the 1500 years since the sites were first used. This does not, however, indicate that they necessarily had the same mythological associations or ritual functions in these disparate epochs.

Several people (Dreux, pers. comm. 2006, Dillon 1985:iii-iv) have postulated that the Candelaria Caves are the “Seven Caves, Seven Canyons” of the *Popol Vuh*, the place of origin for the Kiche' Maya. I originally thought that this was a bit misleading—while there are seven principal watery caves, there are literally hundreds of other caves there, and use of the system is inconsequential after the Late Classic and ceases completely well before the rise of the Kiche'.

Cross-culturally (Basso 1995, Brady and Ashmore 1999), people inscribe meaning onto their own landscape and it is likely that there was a “Seven Caves, Seven Canyons” in every part of the Maya World. The placement of human origin in a place with seven caves goes far beyond the Maya World—the Aztecs (who did not even enter Mesoamerica until around A.D. 1200) placed the point of entry into the world at a place called Chicomoztoc (“Seven Caves”), and underneath the Templo del Sol at Teotihuacan a lava tube was expanded to form seven different passages, most likely to create their own Chicomoztoc in the center of the city (Heyden 1973, 1975).

Dillon (1985) posited that the Xib'alb'a of the *Popol Vuh* was, in fact, in the municipality of Chisec. Much of this supposition is based on Recinos' (1950:114, 6n) reconstruction of the route the Hero Twins took to Xib'alb'a—the crossroads were identified as San Pedro Carchá (Ibid.:112), at which point they descended from the

highlands “by some very steep stairs” and crossed a swift river (Ibid. 113-4). The residents of Xib’alb’a are called “Ah-Tza, Ah-Tucur” (Ibid. 161) which is normally translated as “Those of War, the Owls,” although the names bear a strong similarity to two groups that straddled the transversal—the Itza and the residents of Verapaz, or Tucurú, as was originally discussed in by Brasseur de Bourbourg (1861, quoted in Recinos 1950:329, 7n). While only one surveyed cave has evidence of use postdating the Classic period, the continued identification of the Chisec area with important sacred space by at least one distant Maya group suggests that the region was still important in Maya mythology for the following centuries.

This indicates that some echo of the importance of this region in the Classic period for ritual activities continued into the early colonial period in a region that would have been only peripherally related to the associated trade route. While many of the pre-collapse shrines in the southern lowlands were likely forgotten, the shrines in this region apparently lived on in myth, although apparently not in practice.

## **V. Ritual “Styles” in the Pasión-Verapaz Region**

### *Public Ritual*

A common analytic trope in the interpretation of Maya cave ritual is the division between public and private ritual, which was first proposed by Brady (1989:404-7) and continued by most scholars working in the discipline (*e.g.*, Awe, pers. comm. 1998; Woodfill and Spenard 2001; Prufer 2002). Brady noted that the material recovered in or near the cave entrance were much more elaborately decorated than that from the dark, restricted interior. Since there was a visible lack of care for appearance based on the

material remains (and often a great physical distance between the plain and decorated remains), Brady argued that these were likely distinct rituals done without the need for impressing an audience.

The general difference in quality between the two types of assemblages could be explained by a comparison of Houston's (2006) concept of "spectacle," to Brady's public ritual. Both consist of a large, elaborate and colorful ceremony designed to impress an audience. Ritual stages where such spectacles could occur are found in Naj Tunich (Brady 1989), Belize (Awe, pers. comm. 1998, Woodfill 1999, Prufer 2002, Peterson 2006), northern Quintana Roo (Rissolo 2003), the present zone (Woodfill and Spenard 2002; Woodfill, Fahsen, and Monterroso 2006), and countless other areas. These stages are often found above an open area where it was possible for an audience to observe ritual activities, and there was typically a dark, inner zone nearby where "private" parts of the ritual events could have been conducted (Woodfill 2002).<sup>22</sup>

In the present region, stages such as these have been identified in all of the primary cave systems investigated by VUPACS. In the Candelaria system, they are present in Cueva del Mico<sup>23</sup> (Woodfill and Spenard 2002), Ventana de Seguridad (Woodfill and Monterroso 2007b), Ratón de los Dientes (Ibid.), Cueva de los Metates (Ibid.), and Cueva la Iluminada (Woodfill, Ramírez, *et al.* 2004). In the San Francisco Hills, most of the cave entrances have evidence of public ritual, but I have specifically identified this phenomenon in Kaaminaq So'tz and Cueva de los Murciélagos (Woodfill, Miller, *et al.* 2003). Two of these are described here to illustrate their common use.

---

<sup>22</sup> For an elaboration on the public/private distinction, see Brady 1989:404-7 and the "public and private ritual" section of this chapter.

<sup>23</sup> This stage and all others are described in Chapter 3.



The west entrance of Ventana de Seguridad consists of a large, brightly-lit chamber naturally divided into two parts. The majority of the room, accessed from the principal entrance, consists of a large degree of naturally-terraced breakdown leading to the main passage of the cave. One formation was artificially leveled with the construction of a stone platform atop it. The second part, largely inaccessible from the first, consists of two ledges (one at the same level as the artificial platform) and a dark side chamber, all of which is entered by a small entrance at its back. Two altars were present,<sup>24</sup> neither of which were visible from the main part of the cave, and the artifacts consisted largely of burnt, unslipped ceramics and obsidian blades. The fronts of the platforms, however, were littered with polychrome sherds, incense burners, more obsidian blades, and pieces of ceremonial regalia such as “tinklers.” The chamber below, however, was almost completely devoid of artifacts.

Private ritual is also commonly discussed in the literature (*e.g.* Brady 1989; Stone 1995; Prufer 2002; Rissolo 2003; Peterson 2005; Woodfill, Fahsen, and Monterroso 2006), and is a broad category consisting of any sort of ritual activity occurring without evidence of an audience. These rituals were often performed further into the caves (often without a dramatic entrance for staging events) and do not appear to have been associated with any particular spectacle, much like the rituals performed in the interior of Naj Tunich. It is unlikely that these rituals were completely private, however, since, as has been mentioned, others would likely have noted the practitioner leaving to perform the event. The fact that the material was left behind seems intentional as well, serving as a record to any who “witness” the activity at a later date.

---

<sup>24</sup> One in the dark chamber and the other at the very back of the upper ledge.

*Ritual neither Public nor Private*

A third “type” of ritual activity renders problematic the public/private dichotomy, as it mixes characteristics of both. It appears to have occurred only in the Candelaria Caves and Hun Nal Ye and was largely limited to the Early Classic. In the Candelaria Caves, this ritual activity occurred on three large, brightly-lit platforms above the Río Candelaria. While the material evidence would suggest a “public” ritual space due to their location at the entrances, the overwhelming numbers of polychromes and presence of architecture, there is no possible space for an audience to observe the proceedings. In a similar way, the presence of decorated vessels in Hun Nal Ye and the prominent display of these vessels and the stone box stand in contrast to the difficulty of reaching the cave and the restricted nature of its interior.

These inconsistencies did not stop the areas from being important ritual spaces. The Candelaria entrances are potentially the three most utilized spaces in the entire region. Each is covered with a virtual carpet of artifacts, including unslipped, monochrome, and a large amount of polychrome ceramics; obsidian blades; shell “tinklers;” and human bones.<sup>25</sup> Excavations in the down-river entrance of Verónica (Woodfill and Monterroso 2007b) have revealed that this layer (which covers most of the 25 by 150 square meter platform) is around 15-20 cm thick, although in several sections sterile soil was only reached over a meter below the surface.

Ceramic analysis of the samples obtained from these cave sections reveals that the ritual activity was largely limited to the Early Classic, a time period when human settlement in the region is presently invisible. The Candelaria material is explicitly locally-produced for ritual consumption—there is a very small amount of variety in forms

---

<sup>25</sup> mostly babies (Kennedy, pers. comm. 2006)

and types (see chapter 6) present in the sample, and there is a similar lack of variation in the iconography and style present on the polychrome material (Burgos, pers. comm. 2006). Neutron activation analysis has strengthened this claim, showing that there was very little variation in paste (Bishop, pers. comm. 2007). The material in Hun Nal Ye is also likely local, although many are without the kill-holes or broken rims common to cached vessels in other parts of the Maya world, so little can be said about paste composition.

While the ceramics were likely locally produced, it is highly unlikely that these rituals were undertaken to any significant degree by local actors. The sheer volume of the remains stands in direct contrast to the largely invisible Early Classic population. In several other places (*e.g.*, Woodfill, Fahsen, and Monterroso 2006; Woodfill 2006) I have suggested that the ritual in the Candelaria Caves is the result of pilgrimage associated with the Great Western Trade Route, and the ceramics would have been produced by locals for consumption by visitors to the system. The draw to these particular areas is probably related to their ease of access, the large size and brightly-lit nature of the passages, and, most importantly, the location above the Río Candelaria. Most pilgrimage centers tend to be associated with rain and water (Kubler 1985:314 and Martínez Marín 1972:162, both quoted in Brady 2001:5), and these specific sites are closely linked to the river. Like Hun Nal Ye, it is even possible to hear the water flow past the platform for much of the year.

### *Ritual Styles*

At least within the context of the Pasión-Verapaz region I believe that it is useful to elaborate upon Brady's public/private division, since several of the contexts have characteristics that blend the two types. The ritual activity here can be broadly situated in the following four categories:

- 1) Spectacle—this type of ritual activity corresponds to public ritual in Brady's system, and the characteristics are nearly identical. The ceramic assemblage consists largely of decorated material—polychromes and appliqués—although simple, unslipped jars and bowls are also present. Other ritual paraphernalia and parts of the ritual costume are often present as well, which were likely intentionally cached (Brady, pers. comm. 2006). The location for the ritual *must* have a place where an audience can congregate to observe it; this place is normally below the “stage” and near the entrance with easy access and natural illumination. The spaces used for spectacle normally have a high investment in architectural modification, although this is not always the case (*e.g.*, Kaaminaq So'tz, CBA-1-8).
- 2) Off-stage ritual—this type of ritual activity is always associated with spectacles. The assemblage consists largely of simple ceramic wares and obsidian blades. Hearths and altars are common. While off-stage ritual spaces are found in close proximity to spectacle spaces, they are hidden from the audience observing the spectacle. They are often in dark or nearly-dark parts of the cave. Sometimes these areas have architectural modification in order to close them off from the rest of the cave.

- 3) Simple, small-scale ritual—this type of ritual activity corresponds to the majority of private ritual in Brady’s system. It was normally practiced in more restricted parts of the cave without room for an audience, and is normally in the dark zone. The ceramic assemblage normally consists of undecorated, simple types.
- 4) Elaborate, small-scale ritual—this type of ritual activity blends together aspects of both “public” and “private” ritual. It can be conceptualized as a spectacle without an audience—an artifactual assemblage consisting largely of decorated vessels are found in an area of a cave with architectural modification. These places strongly evoke the sense of the numinous, be they the vast entrances in the Candelaria Caves or the rumbling, restricted interior of Hun Nal Ye. Water is not only seen but experienced in these places, where the rushing current or crashing waterfall creates a steady aural backdrop to any activities there.

Insoll’s (2004) problematizing of a shrine’s definition is particularly *a propos* here, since the density of the artifactual assemblage can tell us how specific the location of a shrine is. In simple, small-scale rituals, the conceptualization seems to be more flexible, and an entire cave segment (*e.g.* the dark passage with burnt corncobs in Ventana de Seguridad, CND-103) or even a complete cave (*e.g.* Cueva de la Seca, CBA-1-10) can be used without an apparent focus. Even in contexts where such ritual events are frequently occurring in relatively close quarters such as in the Petexbatun (Brady *et al.* 1997) or Entrada del Sol (CND-101), care was taken to avoid previous ritual assemblages. The other ritual styles, however, are common, repetitive acts that center

upon a specific space, be it a platform, an altar, or a formation. As a result, the assemblages of specific ritual events have been blended together.

Sometimes multiple ritual styles are found in the same cave. Ventana de Seguridad (CND-103), for example, contains at least three of the ritual styles. Entrance 2 contains ritual stages with constructed platforms for observing the events. Both stages have an associated chamber (Platform 1) or nook (Platform 2) for “off-stage” events. The interior of the cave has scattered remnants of various, simple, small-scale ritual events. In addition, these ritual styles are often contemporaneous—all of the ritual activities in Ventana de Seguridad and Verónica date to the latter part of the Early Classic (*ca.* A.D. 460-550)—and the materials used for the ritual activities were chosen from the same “market,” since the majority of material throughout the Candelaria Caves was produced locally. The correlation between ritual style and ceramic attributes (form and decoration) in spite of the range of material available suggests that the ritual paraphernalia does allow these rituals to work as a form of social and symbolic communication in the manner envisioned by Geertz (1980) and Turner (1969, 1974). They were overtly chosen to communicate the relative social standing of the practitioner and the audience.

In much the same way as Bell’s, these four ritual styles have a complex relationship to notions of power and hierarchy. All seem to involve two distinct, hierarchal systems—social and “spiritual.” Rituals with a real or implied human audience serve to place the practitioner in a superior social position to the audience. The wealth that is exhibited and squandered in spectacles functions in the same way as the “closed-door” nature of the other ritual activities. In many of the modern Q’eqchi’

villages with whom I have worked, for example, many of the ceremonies are divided into two distinct parts, which could be considered “public” and “private” in much the same way. The majority of the ceremony involves music, prayer, and speeches and involves the whole community. At the end of this public gathering, however, the village elders conspicuously exit, at which point they go into a cave or other sacred space to make offerings and communicate with God and the *tzuultaq’a*, or “owner of the land,” on the behalf of the community. While this is done without an audience, the entire village sees the elders leave under a cloud of billowing incense with alcohol, chocolate, and animals to be used in the ceremony. The villagers all know who is participating in the “private” ritual, where it is occurring, and what is being offered.

In fact, these rituals likely served to elevate the status of these “closed-door” rituals, since it widened the social chasm between those who could participate or witness the ceremony and those stuck outside (Woodfill, Fahsen, and Monterroso 2006). Each of the ritual events also involves the petitioning of a deity or other invisible being. Mesoamerican religions are based on a fundamental covenant between the human and spiritual worlds (B. Tedlock 1992, Monaghan 1995, D. Tedlock 1996), and each is dependent on the other. While I have previously assumed (Woodfill 1999, 2002, 2004; Woodfill and Spenard 2002) that the ritual recreated a spiritual order in which the human actor was beneath the “supernatural” being, I am no longer certain that this is the case, especially when considering the difference between simple and elaborate small-scale rituals. Here, it is possible that the presence of more expensive materials such as polychrome pots and jade would have the same effect that they would in establishing the social hierarchy, showing the invisible audience the importance of the ritual practitioner.

## VI. Trade Shrines and Pilgrimage Shrines

### *The Pilgrimage Problem*

Silverman (1994) characterized pilgrimage centers as a constructed place or feature in the natural landscape that draws “a *transient* population of worshippers from across a social, political, economic, cultural, and special spectrum and, in so doing, to synthesize critical social and cultural elements from wider patterns of belief and practice in a region or regions” (*Ibid.* 2-3, emphasis in original). At the site of Cahuachi, Peru, natural *huacas* have architectural modifications which serve to “bound” the sacrality contained within them and bring them into the cultural world (*Ibid.* 9).

Cozumel is a well-documented conquest-era Maya pilgrimage site. It was recorded as a stop for seafaring merchants at the time of contact (de Landa 1978). The island (and Isla de las Mujeres) had strong associations with the moon goddess, Ix Chel, and the goddess and her talking oracle were major draws to the islands (Rathje and Sabloff 1973). In spite of this, the first major investigation conducted on Cozumel focused on the island’s importance as a stop for long-distance trade (*Ibid.*). Recent research by Patel (2005) has completely negated this interpretation, convincingly arguing that the economic base of life for the inhabitants of Cozumel was pilgrimage. The channel separating the island from the mainland is extremely difficult to navigate (even with motorboats) due to a strong current, so it is unlikely that the island would have been sought out by merchants, who could have made the journey much easier and safer by staying closer to the mainland. In addition, all of the settlements, roads, and shrines are arranged to take full advantage of caves and other natural features on the island and facilitate travel to them from ports.



In lieu of actual historic accounts or inscriptions, designating a cave or shrine as a “pilgrimage site” is difficult. Ceramics, which provide so much of the basis of our understanding of local culture, are problematic, since there is no reason to assume that the ritual practitioner and ritual vessels originated in the same place. In fact, INAA results from Naj Tunich (Sears and Brady 1997, Brady 2001) and the Candelaria system (Bishop, pers. comm. 2007) revealed that in spite of the great distances people traveled to perform ritual there, the ceramics were almost exclusively locally produced. This echoes contemporary pilgrimage among the Q’eqchi’, who often sell flowers and other objects near their homes in order to obtain money to buy the ritual paraphernalia near the shrine itself (Adams and Brady 2005:13).

Several authors (Brady 1997:357, Prufer 2002:638, Rissolo 2005:351, Patel 2005, Peterson 2006) attempting to correlate cave and settlement chronology have noted that periods without evidence of regional occupation are well represented in the cave material.<sup>26</sup> While tempting to posit pilgrimage as an explanation, I must agree with Peterson and Rissolo that an incomplete picture of the region or a more dispersed settlement pattern would create the illusion of an absent community, so other criteria need to be established in order to designate a shrine as a pilgrimage site.

The question becomes, then, how can one determine if a site is a pilgrimage center? Two factors were identified by Silverman (1994) in addition to the lack of associated sites: architectural modification<sup>27</sup> and elements characteristic of multiple sites and regions (corresponding to the center’s “catchment area”). The Candelaria Caves do exhibit both of these characteristics in addition to the apparent lack of population. There

---

<sup>26</sup> This was also noted by de Borhegyi (1953, 1954), J.E.S. Thompson (1964), and Kendall (1991).

<sup>27</sup> This characteristic was also identified by Brady (2001:6).

is a wide variety of architecture in the Candelaria Caves (stone paths, altars, walls, and platforms) and, while the artifactual assemblage primarily indicates central Petén associations, the ceramics demonstrate modes such as interior smudging and smaller vessel diameters more typical of the northern highlands (see chapter 8). Hun Nal Ye does not contain significant evidence of architectural modification, but is not associated with any known settlement and draws from a very large catchment area that includes most of the highlands and, to a lesser extent, the lowlands.

### *Trade and Pilgrimage*

One major factor distinguishes these sites from many of the other pilgrimage centers, however—their association with a major trade route. In spite of their proximity, Candelaria and Hun Nal Ye are associated with disparate regions that were the beginning and end points of interregional trade—the highlands were the source of raw materials (*e.g.* jade, iron pyrite, quetzal feathers, and obsidian) that were necessary for the maintenance of Classic Maya society in the lowlands. It is likely that most of the visitors who performed rituals in Candelaria and Hun Nal Ye were involved in long-distance trade and were not “pilgrims” in the strictest sense. While it would be simplistic to create a sharp dichotomy between “trade shrines” and other types of pilgrimage sites, it is productive to frame the discussion of the Candelaria Caves in the larger context of interregional trade.

The modern Q’eqchi’ often make pilgrimages to sacred places that are home to important *tzuultaq’aeb’* at various times of the year (Adams and Brady 1994, 2005). These beings, literally “hill-valleys,” own different parts of land, and before any

harvesting, planting, building, marketing, and traveling is conducted, offerings are made (Adams and Brady 2005:307, Wilson 1993). It is especially important to note the last two occasions—marketing and traveling—since the Candelaria Caves are associated with a long-distance trade route. According to Adams and Brady (2005:307), the *tzuultaq'a* is often represented as or “like” a road in dreams.

Trade routes are often associated with specific shrines (Crone 1987, Petersen 1994, Nielsen 2001). Along a major llama caravan route in the Andes, for example, travelers stop to perform ritual at a variety of shrines that are associated with resting-points (Nielsen 2001:178). The primary ritual site is located at the mid-point of the journey; rituals there involved petitioning assistance from the *mallkus* in acquiring the goods they have set out to obtain (Ibid. 180-1). While the rituals in the minor shrines, which are mostly concerned with petitioning safe passage through segments of the route, are short and simple (Ibid. 181), the rituals at the primary route are more elaborate and often last an entire day.

One common feature of shrines in Latin America seems to be their location at political or geographical boundaries (Polo Sifontes 1979; Sallnow 1991:298; A. Adams and Brady 1994, 2005; Nielsen 2001). This is most visible in the llama caravan routes discussed above—not only is the major shrine at the highest point of the journey but small shrines called *apacheras* have been set up at summits, passes, and difficult parts of the route (Nielsen 2001:182). In the area presently under investigation, the modern Q'eqchi' often set up a cross representing the *tzuultaq'a* alongside a road marking the nexus of two communities (A. Adams and Brady 2005:307).

Both the Candelaria Caves and Hun Nal Ye are located at a geographical transition—the former is located underneath the very edge of the foothills leading into the highlands and the latter is in one of the last high hills before reaching the lowlands. During the period of primary use, these caves also marked the break between highland and lowland Maya culture. During the Late Classic, it might be more than coincidental that the decrease in interregional importance for these two shrines corresponds to a blurring of the highland-lowland divide that the establishment of the Cancuen kingdom created.

## **VII. The Functions of Ritual in the Pasión-Verapaz Region**

While Kertzer (1988) and Bell (1993, 1997) argue that ritual is an important way to reify power hierarchies, this is not the only function that ritual can serve. In caves in the Pasión-Verapaz Region, ritual serves at least three other functions, as releasing tension, marking place, and as an economic resource.

### *Ritual as Releasing Tension*

During the course of his fieldwork in the Trobriand Islands, Malinowski (1984 [1925]) noticed a common phenomenon he referred to as “magic.” This was a specific kind of ritual, one based in specific, routinized acts and taboos that would result in a desired *end*. While this was performed in various contexts, he noted that it the largest and most elaborate corpus of magic belonged to deep-sea fishers. Other islanders, including fisherman who did not stray from the lagoon, had a much less developed magical tradition since there was less anxiety in their day-to-day lives.

Anxiety as a cause for ritual underlies much of the current and classical scholarship, from the rite of integration of van Gennep (1960) to the “life-crisis rituals” and “rites of reversal” of Turner (1973) and the political rituals of Kertzer (1988). Anxiety is occasionally covered head-on, as best exemplified by Baker’s work in Sri Lanka, where he found that “some ritual practices . . . ‘work’ . . . because they help reduce anxiety” (Baker 2000:79). In particular, he examined “first rites” associated with babies and agricultural rites. Both children and crops are fragile, suffering a high incidence of disease or drought, and rituals were carefully performed in order to protect them from harm.

In the Maya world, Royes *et al.* (1940:9, quoted in Patel 2005:97) noted that those traveling to Cozumel “employ many superstitions,” largely because of the difficulty and dangers of this undertaking. The modern Q’eqchi’ of Alta Verapaz often perform rituals before traveling, planting, harvesting, or selling (A. Adams and Brady 2005). Walter Adams (1991) reports a thrice-yearly pilgrimage by the Tzeltales and Tojoabales to ensure “bountiful harvests and plentiful, though not damaging, rains.” All of these rituals are performed before events that are outside of an individual’s control.

The Candelaria system was the most intensively used of the Pasión-Verapaz region shrines, and there are several factors that might have made anxiety as an important aspect of rituals performed there. The short span of time for the bulk of the cave ritual (less than 100 years) corresponds to the peak of long-distance travel through the region, and the cave is located at the transition zone between two very different cultural and geographical regions. Visitors to the cave system, like the Trobriand deep-sea fishermen, would have been traveling far away from home in *terra incognita*. Could this have

resulted in an increased anxiety that could have been mitigated through ritual offerings at specific shrines along the route? The nature of the material remains, especially the repetitive smashing of elaborate polychrome vessels, is often correlated to public ritual events in other parts of the Maya world. If the ritual was “magic” in the sense of Malinowski, however, the audience would not be members of the human community but beings such as the *tzuultaq’a* who would be able to ensure a safe journey and return.

Agricultural rituals performed in the region, most notably in the Candelaria system, would likely have served a similar function. Offering the first harvest to the gods (before the corn was even ripe!) would have assured a favorable outcome on the actual harvest (Redfield and Villa Rojas 1934:127, Morehart 2005, Prufer 2002). This is also seen in other parts of the Maya World—recorded pilgrimages to Naj Tunich mostly correspond to the beginning of the rainy season and often involve important personages (Brady 2001, Stone 1995), almost certainly undertaken to assure a good growing season. Many rituals in caves, in fact, appear to have been closely linked to agricultural cycles, and would have ensured good rains and harvest.

### *Ritual as Marking Place*

Fundamentally, landscapes are imbued with meaning and memory, and any interaction with any particular place colors an individual’s perception of it. This is equally true on a group or social level (c.f. Basso 1994, Humphrey 1995, Knapp and Ashmore 1999, Brady and Ashmore 1999), and there are several different ways in which meaning and memory are modified through ritual activities.

In Mongolia, for example (Humphrey 1995), pastoralists still often only stay in a particular valley for a particular year, often only returning to any particular valley after a slow meandering cycle of ten or even twenty years. Each of these valleys is believed to be owned by a specific supernatural entity, the *gazarin ezin*, a being reminiscent of the Q'eqchi' *tzuultaq'a*, who is believed to be responsible for the rain, weather, and quality of the fodder in his valley. Rituals are performed to the *gazarin* each year on a special altar, the *oboo*, which is placed atop the highest peak adjacent to the valley. Part of the ritual involves the upkeep of the *oboo* itself, and if a pastoralist is considering staying in a valley all he has to do is climb to the *oboo* to see if it is maintained, signifying that the valley is occupied. In this manner, the ritual serves two distinct, practical purposes—the *gazarin ezin* is kept in good spirits, assuring a good year, and use of the valley is formally established for the rest of the pastoralist's time there.

It is quite possible that the Maya “marked” several of the shrines in this manner. In the Early Classic, Tres Islas and the Candelaria system had several “exotic” symbols and objects such as the pecked cross, Teotihuacano “warriors,” rare ceramic types, and Tlaloc masks. There was, however, still an individual, distinctly local character the artifactual assemblages, and the resulting message of any ritual activity would have involved interplay between the two. Similarly, in Hun Nal Ye, the Terminal Preclassic and Early Classic ceramics are distinctly central highland, showing a strong association with this distant region, although the stone box represents an even more exotic tie.

Tres Islas is especially telling—it is not located near any major settlement, but instead was likely chosen because of its dramatic location, high atop a levee at the confluence of the Río Pasión and the Río Machaquila. It was almost certainly conceived

of as a “gateway” into the region to the south, and its maintainers managed to play with contrasting symbols to emphasize their importance. While the stelae did show ties to the Central Petén, they also contain the first reference to the Upper Pasión Kingdom, asserting a *local* base of power. The caches found beneath the three stelae<sup>28</sup> (Tomasic and Quintanilla 2004, Tomasic *et al.* 2005, E. Barrios 2006) contained even more exotic imagery—corals and marine shells and carved jade objects, although there were also objects of local production like obsidian prismatic blade cores and chert flakes. The ceramics are a similar mixture between the Central Petén Tzakol-sphere wares and the local Chicanel continuation. In the Late Classic, while the shrine was still used, it lost much of this interplay, as all of the ceramics recovered around the shrine belong to the Cancuen sphere. There was no major resetting of the monuments, although a platform was built around the stelae.

This imposition of meaning and memory upon the shrines appears to have been periodically flipped upon its head. Panel 1 from Cancuen, for instance, while detailing the history of the site, notes that a new king imposed upon the city by Calakmul performed a ritual at a hill or mountain called “Makanwitz” *en route* to the site (Fahsen *et al.* 2001). The fact that the scribe felt it necessary to note this ritual seems to indicate that the importance of the ritual was the opposite of what is described above, that the hill marked the king and allowed him to usurp the throne from his predecessor. It is highly likely that many of the rituals performed in the region’s shrines similarly marked both the site and the practitioner.

---

<sup>28</sup> assuming that their contents were well known



*Ritual as Economic Resource*

Brady (1994, 2005a) has discussed the economic ramifications of cave ritual in the ancient Maya economy, noting that over half of all of the jade recovered by the Petexbatun project and between twenty and fifty percent of most other artifact classes were found in caves. Many of these objects had little evidence of use (or were of materials that never “wore out,” like jade and pyrite), and he postulated that cave ritual might have functioned as a way to take items out of circulation, necessitating the production of more goods.

Another, related line of investigation is the impact of this ritual activity on the local population (c.f. Adams and Brady 1994, 2005; Brady 2001; Woodfill 2005; Monterroso and Woodfill 2006; Monterroso 2006). This is most obvious in the Candelaria Cave system—while the caves were heavily used throughout the Classic period there was never a large local population, even though the vast majority of ceramic material appears to have been made locally. Through production of ritual paraphernalia for the majority of ritual practitioners using the cave system, ritual activity became a largely economic resource for the local population, one that would have provided material, cultural, and symbolic capital.

La Lima, a small Late Classic community at the edge of the Candelaria system, appears to have exploited the caves and cave ritual as economic resources (Monterroso 2006). Every detail of the layout of La Lima created a direct association with the caves. Instead of being organized in a traditional way, the site was arranged in a linear fashion, with each architectural group several hundred meters from the next, and the two largest groups were placed at opposite entrances of the last river cave of the system. The layout

had the added advantage of forcing any visitors to the caves coming from the east (which is where most of the traffic likely came from) to traverse tilled fields and pass alongside residences.

This would have served two principal advantages for the residents of La Lima— 1) it would have allowed them to exert a level of symbolic ownership over the caves, which would have increased their prestige, and 2) it would likely have allowed the residents to acquire material and symbolic capital through potential “tolls,” donations, or sale of ritual paraphernalia to the visitors. Within the site itself there is evidence that could strengthen this argument—figurines, jade, pyrite mirrors, etc.—more contemporaneous sites of similar size in the area need to be formally investigated.

## **VIII. Conclusions**

In this chapter, I have attempted to tease out specific kinds of ritual activities and use them as building blocks to address larger issues in the ancient Maya culture and Maya studies itself. While it is impossible to directly reconcile known rituals from ethnographic and epigraphic contexts with the archaeological record in many cases, large patterns and different aspects of ritual can be identified with some degree of certainty. The evidence points to ritual performing myriad functions in Maya society, from maintaining power to providing a steady income, from releasing tension on a long voyage to imposing meaning upon the surrounding landscape.

At the core of the ancient Maya cave use is a dizzying amount of time and labor that has been invested in the caves. Until the Late Classic population explosion, in fact, ritual and trade are the only two activities that have left a significant mark on the region.

This certainly speaks to the central importance of caves for the ancient residents of the Verapaz-Pasión region.

In academia, much of the ritual associated with travel has been subsumed into the general category “pilgrimage,” a catch-all term for ritual activity in both archaeological and ethnographic contexts which occurs some distance from the place of residence of the practitioners. However, two distinct types of long-distance ritual are apparent, only one of which involves a true pilgrimage center, *i.e.*, the endpoint of a long journey. The other is evinced by the Candelaria system and is more accurately referred to as a trade shrine.

It would be wrong to create a sharp dichotomy between these two for several reasons, not the least of which are the problems inherent in assigning one specific function to a shrine used by a wide range of local and “international” individuals. Research among modern Q’eqchi’ pilgrims (Adams and Brady 2005) also indicates that several shrines, both local and distant, were visited on the same journey. The evidence from Cozumel is fairly conclusive, however, that it was the primary goal for the pilgrims who went there, while the evidence from the Candelaria Caves strongly suggests that the rituals were associated with larger patterns of trade and transit between the highlands and lowlands.

While it is clear that ritual *did* many things within Classic Maya society, the discussion above focuses on a different set of traits than those indicated by previous scholars (Kertzer 1988; Bell 1992, 1997; Rappaport 1999; Insoll 2004). The incorporation of sacred space and much of the public and private ritual served to reify power structures, and the pilgrimage involves the construction of a contract between travelers and the “supernatural” beings that inhabited the ancient landscape. This might

be the basic distinction between trade shrines and pilgrimage centers. Most known Classic Maya ritual does seem to reinforce social structure, maintaining a distinction between elites and commoners and associating the former with the sacred world of the gods and ancestors. Some aspects of the ritual experience at the Candelaria Caves and Hun Nal Ye were related to larger political patterns, such as the associations with the central Petén serving to demonstrate a level of control of the route. Power only truly came into play as an abstract concept, however, since the structure being recreated was between the human petitioner and the petitioned “sacred.”

## CHAPTER IX:

### CONCLUSIONS

#### **I. Introduction**

In writing this dissertation I attempted to demonstrate the broad range of topics that could be addressed through the careful interpretation of ritual remains. While a variety of phenomena was discussed, I believe that most of these topics can be reduced to three broad ideas. The first is that ritual remains must be understood as evidence of past ritual behavior, and that it is necessary to find patterns in the data and use it to address larger issues in Maya society. The second is that these remains must also be understood as pertaining to Maya society in general and should be used to explore other lines of inquiry including economy, history, and politics. The final idea is that relating the ritual remains to local and distant settlements allows the archaeologist to begin to formulate hypotheses concerning cultural affiliations and even ethnic identity.

#### **II. Ritual Remains as Ritual Remains**

The most obvious way to talk about artifacts recovered from ritual contexts is as the “leftovers” from ritual action. As has been repeatedly emphasized above, however, this forces the archaeologist to enter inherently dangerous and murky waters—although these artifacts are evidence of ritual behavior, behavior is a field of inquiry not often accessible to archaeologists.

While it is easy to succumb to the desire to classify material remains into rigid categories, I find it more useful to focus on the different ways that the ritual remains can be contextualized, to identify the multiple functions that a single ritual object or event might have had, then relate these to broader issues in Maya studies.

While by no means conclusive, I discussed several possible ways that specific ritual remains can speak to larger patterns. These included several ways in which ritual intersects with the economy, as both providing sustainable income (in a Precapitalist context) and providing a way to reduce stress for merchants involved in long-distance trade. I also discussed the ways that ritual in known shrines can mark both the practitioner and the shrine in the communal mind, and the way that a simple interplay between “public” and “private” ritual acts can serve to augment individual power and solidify social structure and standing.

#### *Relationship to other Cave Surveys*

In the 1970s, Patricia Carot (1976, 1980, 1982a, 1982b, 1987, 1989) conducted an archaeological survey of the Candelaria Caves, Juliq', and B'omb'il Pek and registered and mapped several archaeological sites in their vicinity, and a second reconnaissance was undertaken in a cave in the Candelaria system shortly thereafter (Pope and Sibberenson 1981). While not conducting an archaeological investigation, Daniel Dreux (1968, 1973, 1974, 1978) has been the driving force in cave exploration in the region, exploring, mapping, and (as was the case with Carot) bringing specialists into the region to conduct specific surveys.

This work is strongly indebted to this previous research, especially that of Carot and Dreux, and this work can be seen largely as an extension of it. Most of the caves surveyed were present on Dreux' map, and many of the archaeological features investigated were registered by Carot. It differs from these other projects because of the large surface component to the investigations. Carot (1989:11) recognized the ritual nature of the caves and documented several sites where those using the caves likely lived, but because of the limited time spent there she was unable to directly test the relationships between them.

Several regional cave surveys have been conducted in recent years (Brady and Veni 1992, Brady *et al.* 1997, Awe *et al.* n.d., Prufer 2002, Rissolo 2003, Patel 2005, Peterson 2006, Ishihara 2007) in various parts of the Maya world, and have documented a wide range of cave utilization and ritual. This project is distinct from the others in one fundamental way—it occurs at the transition between the two major Maya regions. Much of the material evidence can be used not only to reconstruct ritual activity, but also the changing boundary between the highlands and lowlands.

Since the 1990s, cave surveys (Brady *et al.* 1997, Prufer 2002, Rissolo 2003, Pugh 2005, Peterson 2006) have demonstrated various ways in which the Maya incorporated sacred space into their communities in order to legitimate elite power. While this was certainly a factor in parts of the region, most notably Raxruha Viejo and the Cancuen palace, the majority of cave ritual dates to a period of light population density.

In addition, this is the first cave survey since Naj Tunich (Brady 1989) that has been largely based on ceramic data. However, the ceramic analyses were undertaken to

address different problems. The Naj Tunich material, like most recovered from cave contexts, is well preserved, and the presence of a large number of “Protoclassic” wares allowed for a detailed examination of the transition from Late Preclassic to Early Classic modes. In the Pasión-Verapaz region, the ceramics have proven to be an effective barometer for measuring changes in highland-lowland interaction.

Ritual activity was related to the Great Western Trade Route, which appears to have been under the control of the central Petén in the latter part of the Early Classic. Materials recovered to date suggest that the ritual still served in order to legitimate systems of power, although on a regional level. The stelae at Tres Islas served to mark the river as being under the control of the central Petén, a message that was reinforced by the ceramic vessels available to use in the Candelaria system.

### **III. Ritual Remains as Historical Record**

Another way that ritual remains are important is by looking at them *outside* of their primary context, as simply pieces of the historical record. Much of this dissertation was devoted to that—the vast majority of ceramics uncovered in the region’s shrines were locally produced, so in addition to revealing aspects about Maya ritual, they reveal much about local production.

The contrast between the staggering amount of ritual remains dating to the latter part of the Early Classic and the paltry evidence of a local population provided one avenue of inquiry for studying the trade route—its history, the shifting struggle over control of it, and its impact on local populations and on the merchants to traveled it.



Other scholars have begun to look at caves as the location of a wide variety of activities, of which ritual was only a part. Brady and Rissolo (2003), for example, documented evidence of mining activities in caves throughout the Maya world, and Brady (1994, 2005) also has followed the economic effect of cave ritual on the Classic Maya economy through the creation of a perpetual need for production of cached goods.

*An Examination of Ancient Maya Trade Routes*

In the seventeenth century, Thomas Gage (R. Adams 1978:32) reported two routes connecting the Guatemalan highlands to the Petén—the “Chinaja Trail,” which began in Coban, passed through the Pasión-Verapaz Region, and ended at Lake Petén-Itza, and a second, eastern route passing through Dolores, Petén. Around the turn of the last century, Eduard Seler speculated about two possible trade routes—one following the Chixoy or Chajul Rivers into the lowlands (1993a:351), and another, dominant route through the Motagua Valley (1993c:324). The Chixoy route was later revived by E. Wyllys Andrews V (1990:7) as the path for a possible Middle Preclassic migration into the southern lowlands.

Both Hammond (1972a) and Arnauld (1990) noted the Chixoy route, but focused primarily on the Chinaja Trail—although apparently unaware of Gage’s (unpublished) map, the route was used by Ixil traders in the nineteenth century and Q’eqchi’ settlers in the twentieth (Adams 1978:32). While the Dolores route was examined by Hammond (1978), it has been largely overshadowed by the other eastern route along the Motagua Valley.

Arnauld (1990:352-3) has weighed the relative benefits of the Chixoy, Chinaja, and Motagua trails, noting that the Chixoy is un-navigable for the majority of the descent into the lowlands. The Chinaja trail is the shortest route between the two regions, but it is more appropriate for light-weight materials, since everything has to be carried. The Motagua, then, would have been used for most of the heavy, bulky goods. She also created a preliminary chronology for the trade routes (Ibid. 360-1)—around A.D. 400, the Motagua was the primary route, but around A.D. 600 the Chinaja trail begins to compete due to increasing political instability in the region. By about A.D. 750, however, the Motagua route dominates again as maritime trade becomes more popular, and continues to attract the majority of merchants until the Spanish conquest.

For the first time it is possible to directly address these theories of trade for the Preclassic and Classic Maya. Research at the site of Cancuen has revealed that much of the material entering the lowlands from Alta Verapaz was, in fact, heavy raw materials such as jade, which was then processed at the site (Kovacevich 2003, 2006). The period of Cancuen dominance is between about 730 and 820, which is only slightly later than the period hypothesized by Arnauld. The collapse at Cancuen and contemporaneous chaos along the Río Pasión corresponded to a marked decrease and eventual cessation of use at trade shrines like the Candelaria Caves and Hun Nal Ye.

The recent decipherment of the full hieroglyphic staircase at Dos Pilas indicates that the Chinaja trail was in regular use by at least the sixth century. There is a variety of exotic associations dating to the mid-to-late fifth century—Central Petén ceramics, a Tlaloc face, and a pecked cross in the Candelaria Caves and Teotihuacan warriors at Tres Islas, and they are contemporaneous to the ritual boom in shrines throughout the region,

particularly in the Candelaria system and Hun Nal Ye. All of these factors together indicate that it is possible to push the use of the Chinaha trail back to about A.D. 460.

*“Ethnicity,” Ethnoscapes, and the Pasión-Verapaz Region*

The term “ethnicity” is occasionally used by archaeologists to designate shared cultural traits (Sanders 1977, Spence 1996, Berlin and Slane 1997). In ethnography, however, ethnicity is something different, a continual process of identity formation (Heinz 1993). Unfortunately, in archaeology we are not privy to much on the level of the individual, much less the subtle, non-material processes that ethnicity involves.

Archaeology does, however, allow us to see different “affiliations” through the lens of material remains—ways in which the artifact-at-hand imitates, alludes to, or generally “looks like” others in the same class. Ceramics are most commonly used for this end, largely because they are the most common artifact recovered in most sites and the only artifact class that is completely crafted by human hands.

These “affiliations” are often offered as evidence for direct links or communication between the potter and his/her group and the groups for which there is a perceivable link—much of the discussion in chapters five, six, and seven are devoted to that end. While careful application of such a discussion can provide useful insights into commerce and politics, it is still a stretch to move from “affiliation” to anything resembling the traditional notion of “ethnicity.”

In an archaeological context, “ethnicity,” when used, seems to indicate a general sense of inclusivity, a group of people united in self-recognition and defined against the

Others outside. Sometimes the affinities are so strong as to suggest a common “ethnicity,” but how can we actually be sure?

Several (Berlin and Slane 1999, Sanders 1977, Spence 1996) have used utilitarian ceramics with apparent success as a marker for determining what is here termed “ethnic affiliation” (Heinz 1993), as the technology used to make them, as well as the tasks for which they were made, tend to change very little over time within the same group. Using this model, it is possible to formulate several general patterns in the region at hand.

The almost complete lack of any highland utilitarian ceramics in the Candelaria Caves or other parts of the region in Early Classic is directly contrasted with the Late Classic, when they dominate the sample. The surface settlements in the southern half of the region use northern highland ceramics to the exclusion of lowland materials as well. This seems to indicate that there was an influx of population into the region from the south in the Late Classic.

Of course, the picture is not as simple as it seems. The sample of ceramics from settlements predating the Late Classic are exceedingly small, and, as was discussed above, it appears that many of the cave ceramics were made by the local population for consumption by visitors to the area. The fact that the material in the northern three-quarters of the area was closely tied to the lowlands while Hun Nal Ye was affiliated with sites throughout the highlands reveals just that. However, to presuppose anything about the local population would ignore the probable influence of power hierarchies, prestige, and the basic ability of local potters to be aware of such market subtleties as the preferences of their clients.

The evidence from the shrines does point to changes in these affiliations over time, however, and the region was home to a constantly moving, always fuzzy border between the highland and lowland spheres. For this reason, I think that Appadurai's concept of "ethnoscape" is especially valid in the Pasión-Verapaz region, even though the concept is formulated in an overly modern idiom:

By *ethnoscape*, I mean the landscape of persons who constitute the shifting world in which we live: tourists, immigrants, refugees, exiles, guest workers, and other moving groups and individuals constitute an essential feature of the world and appear to affect the politics of (and between) nations to a hitherto unprecedented degree (Appadurai 1996:33).

The multiple ethnic identities and affiliations in the region, especially in the Late Classic, seem to be conducive to a discussion of ethnoscares. The Pasión-Verapaz zone is a contested ground with shifting alliances and control, and its location along a pivotal part of a major trade route means that its control affects the politics of Maya states to the same degree that Maya politics affected its residents.

#### **IV. Future Investigations**

All of the ideas and data presented in this dissertation are preliminary and subject to change as investigations progress. In order to assure that they do change, there are several lines of investigation that should be undertaken.

1) A more intense settlement survey must be undertaken in order to obtain a basic picture of the occupational history of the region. In particular, researchers should focus on El Raudal (the likely Early Classic seat of power for the Upper Pasión Kingdom), Raxruha Viejo, La Caoba Vieja, B'omb'il Pek Ruinas, Sebol, the area around Hun Nal

Ye, and two sites, La Linterna II and Yalpemech, that appear to have experienced a Terminal Classic florescence like Altar de Sacrificios and Seibal.

2) Work must also continue in the caves and should focus on the western part of the San Francisco Hills, the Sierra de Chinaha, the central part of the Candelaria system, and the area between Candelaria and Hun Nal Ye. The murals reported by Dreux and the pecked cross noted by Carot must be located and, in the case of the latter, a compass bearing must be taken to determine toward what, if anything, it was oriented.

3) In the laboratory, it will be necessary to complete the ceramic analysis of the surface sites (including Cancuen), submit more samples for neutron activation analysis, and complete the analysis of the human remains, faunal material, and organic residues. This process began in 2007.

## **V. Conclusions**

One of the principal contributions of this dissertation, I hope, is the recognition that ritual remains provide evidence of various aspects of ancient life, not just those infused with obvious religious overtones. The material evidence found in shrines not only suggests that they were used during the ritual, they also give us clues to how they ended up in the shrine, who produced them, who the intended consumers were, and the myriad ways that they reflected and reinforced hierarchies of power.

Although cave assemblages do not exactly mimic those from the surface, they are correlated—the majority of settlements date to the Late Classic and the majority of cave use dates to the Early Classic, although the caves closest to known settlements all have substantial Late Classic use. I do believe that running a cave investigation in tandem

with a regional settlement survey will provide a more holistic perspective on the history of the region and create an engaging model to be tested by future research.

In the Pasión-Verapaz region, caves were an important part of ancient Maya life—living along the transversal, the Maya had access to impressive *natural* temples, so they did not build the “artificial” temple-pyramids so common throughout the rest of the Maya world. Caves have proven to be an important part of modern archaeological research as well, as the material remains found within provide a sensitive barometer to measure cultural-historical change and foreign influence during 2,000 years of ritual activity along the Great Western Trade Route.

## BIBLIOGRAPHY

Adams, Abigail and James Brady

- 1994 Etnografía Q'eqchi' de los Ritos en Cuevas: Implicaciones para la Interpretación Arqueológica. *In* VII Simposio de Investigaciones Arqueológicas en Guatemala. Pp. 205-211. Guatemala City: Ministerio de Cultura y Deportes.
- 2005 Ethnographic Notes on Maya Q'eqchi' Cave Rites: Implications for Archaeological Interpretation. *In* In the Maw of the Earth Monster: Mesoamerican Ritual Cave Use. James Brady and Keith Prufer, eds. Pp. 301-27. Austin: University of Texas Press.

Adams, Richard

- 1971 The Ceramics of Altar de Sacrificios. Papers of the Peabody Museum of Archaeology and Ethnology, Vol. 63, No. 1. Cambridge, MA: The Peabody Museum.
- 1973 Maya Collapse: Transformation and Termination in the Ceramic Sequence at Altar de Sacrificios. *In* The Classic Maya Collapse. T. Patrick Culbert, ed. Pp. 21-34. Albuquerque: University of New Mexico Press.
- 1978 Routes of Communication in Mesoamerica: The Northern Guatemalan Highlands and the Petén. *In* Mesoamerican Communication Routes and Cultural Contacts. Thomas Lee and Carlos Navarrete, eds. Pp. 27-36. Papers of the New World Archaeological Foundation 40. Provo: Brigham Young University.

Aguilar, Boris

- 2004 Informe consolidado de sitios y montículos arqueológicos identificados en el polígono de protección del Parque Nacional Cuevas del Río Candelaria, Chisec, Alta Verapaz, Guatemala. Unpublished MS, Ministerio de Cultura y Deportes, Guatemala.

Anaya, Armando; Stanley Guenter; and Peter Matthews

- 2001 An Inscribed Wooden Box from Tabasco, Mexico. Electronic document, <http://www.mesoweb.com/reports/box/index.html>, accessed March 10, 2007.

Andrews, E. Wyllys IV

- 1961 Excavations at the Gruta de Balankanche, 1959. *In* Appendix to Preliminary Report to the 1959-60 Field Season, National Geographic Society-Tulane University Dzibilchultun Program. Miscellaneous Series, No. 11. Pp. 28-40. New Orleans: Middle American Research Institute.
- 1965 Explorations in the Gruta de Chac. Publication 32. New Orleans: Middle American Research Institute, New Orleans.
- 1970 Balankanche, Throne of the Tiger Priest. Publication 32. New Orleans: Middle American Research Institute.



Andrews, E. Wyllys V

- 1990 Early Ceramic History of the Lowland Maya. *In* Vision and Revision in Maya Studies. Flora Clancy and Peter Harrison, eds. Pp. 1-19. Albuquerque: University of New Mexico Press.

Appadurai, Arjun

- 1996 *Modernity at Large: Cultural Dimensions of Globalization*. Minneapolis: University of Minnesota Press.

Arnauld, Marie Charlotte

- 1986 *Archéologie de l'Habitat en Alta Verapaz (Guatemala)*. Collection Etudes Mésoaméricaines 10. Paris: Centre D'Études Mexicaines et Centraméricaines.
- 1987 Regional Ceramic Development in the Northern Highlands, Alta Verapaz, Guatemala: Classic and Postclassic Material. *In* Maya Ceramics: Papers from the 1985 Maya Ceramic Conference, Part II. Prudence Rice and Robert Sharer, eds. Pp. 307-28. Oxford: BAR.
- 1990 El comercio clásico de obsidiana: rutas entre tierras altas y tierras bajas en el área maya. *Latin American Antiquity* 1(4):347-67.

Aveni, Anthony

- 1989 Pecked Cross Petroglyphs at Xihuingo. *Archaeoastronomy* 14:S74-115.

Aveni, Anthony; Horst Hartung; Beth Buckingham

- 1978 The Pecked Cross Symbol in Ancient Mesoamerica. *Science* 202:267-79.

Awe, Jaime; Cameron Griffith; and Sherry Gibbs

- n.d. Stelae and Megaliths Monuments in the Caves of Western Belize. Unpublished MS, Institute of Archaeology, Belmopan, Belize.
- 2005 Cave Stelae and Megalithic Monuments in Western Belize. *In* In the Maw of the Earth Monster: Mesoamerican Ritual Cave Use. James Brady and Keith Prufer, eds. Pp. 223-48. Austin: University of Texas Press.

Bahn, Paul

- 2001 Save the Last Trance for Me: An Assessment of the Misuse of Shamanism in Rock Art Studies. *In* The Concept of Shamanism: Uses and Abuses. Henri-Paul Francfort and Roberte Hamayon, eds. Pp 51-94. Budapest: Akadémiai Kiadó.

Baker, Victoria

- 2000 Ritual Practice in a Sinhalese Village: Coping with Uncertainty. *In* The Nature and Function of Rituals: Fire from Heaven. Ruth-Inge Heinze, ed. Pp. 49-80. Westport, CT: Bergin and Garvey.

- Ball, Joseph  
 1977 Archaeological Ceramics of Becan, Campeche, Mexico. Middle American Research Institute Publication 43. New Orleans: Tulane University Press.
- Ball, Joseph and John Ladd  
 1992 Ceramics. *In* Artifacts from the Cenote of Sacrifice, Chichen Itza, Yucatan. *Memoirs of the Peabody Museum of Archaeology and Ethnology* 10(3). Pp. 191-233. Clemency Coggins and Orrin Shane, eds. Cambridge: Harvard University Press.
- Barriéntos, Tomás  
 in prep The Archaeology of Cancuen, Guatemala. PhD dissertation, Department of Anthropology, Vanderbilt University.
- Barriéntos, Tomás and Arthur Demarest  
 2000 Redescubriendo Cancuen: Nuevos datos sobre un sitio fronterizo entre las tierras bajas y el altiplano maya. Paper presented at the XIV Simposio de Investigaciones Arqueológicas en Guatemala.  
 2006 Cancuen: Puerta al mundo maya. Paper presented at the XX Simposio de Investigaciones Arqueológicas en Guatemala.
- Barrios, Rosalito  
 1995 Cincuenta áreas de interés especial para la conservación en Guatemala. Guatemala: Centro de Estudios Conservacionistas.
- Barrios Villar, Edy Alejandro  
 2006 *Tres Islas: Un Puesto de Control Comercial en le Río la Pasión*. Licenciatura Thesis, Department of Archaeology, Centro Universitario de Petén, Santa Elena, Petén, Guatemala.
- Basso, Keith  
 1996 Wisdim Sits in Places: Notes on a Western Apache Landscape. *In* Senses of Place. Steven Feld and Keith Basso, eds. Pp. 53-90. New Mexico; School of American Research Press.
- Becquelin, Pierre and Claude Baudez  
 1984 Tonina, une cité maya du Chiapas (Mexique), v. VI. Mexico City: Centre D'Étudies Mexicaines et Centraméricaines.
- Becquelin, Pierre; Alain Breton; and Véronique Gervais  
 2001 Arqueología de la región de Nebaj, Guatemala. Cuadernos de estudios Guatemaltecos No. 5. Mexico City: Centre D'Étudies Mexicaines et Centraméricaines.

- Bell, Catherine  
 1992 Ritual Theory, Ritual Practice. Oxford: Oxford University Press.  
 1997 Ritual Perspectives and Dimensions. Oxford: Oxford University Press.
- Benson, Elizabeth  
 1985 Architecture as Metaphor. *In* Fifth Palenque Round Table, 1983. Merle Greene Robertson and Virginia Fields, eds. Pp. 183-8. San Francisco: Pre-Columbian Art Research Institute.
- Berlin, Andrea and Kathleen Warner Slane  
 1997 Tel Anafi II, I, The Hellenistic and Roman Pottery. *Journal of Roman Archaeology*, Supplement 10, II, i.
- Bill, Cassandra  
 2001 Tipología y análisis preliminar de la cerámica de Cancun. *In* Proyecto Arqueológico Cancun Informe Preliminar No. 2. Nashville: Vanderbilt University Press.
- Bill, Cassandra and Michael Callaghan  
 2002 Frecuencias relativas de los tipos y modos cerámicas en Cancun. *In* Proyecto Arqueológico Cancun Informe Preliminar No. 3. Nashville: Vanderbilt University Press.
- Bill, Cassandra; Michael Callaghan; and Jeanette Castellanos  
 2003 La Cerámica de Cancun y el Alto Pasión. *In* Proyecto Arqueológico Cancun Informe Preliminar No. 4. Nashville: Vanderbilt University Press.
- Binford, Lewis  
 1962 Archaeology as Anthropology. *American Antiquity* 28:217-25.  
 1964 A Consideration of Archaeological Research Design. *American Antiquity* 29(4):425-41.
- Bond, Margaret  
 1989 Ceramics. *In* Archaeological Investigations in the Department of Jutiapa, Guatemala, by Robert Wauchope and Margaret Bond. Middle American Research Institute Publication 55. Pp. 85-100. New Orleans: Tulane University Press.
- Bonor Villarejo, Juan  
 1987 Exploraciones en las grutas de Calcehtok y Oxkintok, Yucatán, México. *Mayab* 3:24-31.  
 1989 Las cuevas mayas: Simbolismo y ritual. Madrid: Universidad Complutense de Madrid.

- Bonor Villarejo, Juan and Ismael Sánchez y Pinto  
 1991 Las cavernas del municipio de Oxkutzcab, Yucatán, México: Nuevas aportaciones. *Mayab* 7:36-52.
- de Borhegyi, Stephan  
 1953 The Miraculous Shrine of our Lord of Esquipulas in Guatemala and Chimayo, New Mexico. *El Palacio* 60:83-111.  
 1954 The Cult of Our Lord of Esquipulas in Middle American and New Mexico. *El Palacio* 61:387-401.  
 1963 Precolumbian Pottery Mushrooms from Mesoamerica. *American Antiquity* 28(3):328-38.  
 1965 Archaeological Synthesis of the Guatemalan Highlands. *In Handbook of Middle American Indians, Volume 2: Archaeology of Southern Mesoamerica, Part 1*. Pp. 3-58. Austin: University of Texas Press.
- Bourdieu, Pierre  
 1977 *Outline of a Theory of Practice*. Richard Nice, trans. Cambridge: Cambridge University Press.
- Brady, James  
 1982 El Proyecto Arqueológico Naj Tunich: La Cueva de las Incripciones, Reporte Preliminar. Unpublished MS, Instituto de Antropología e Historia, Guatemala.  
 1989 An Investigation of Maya Ritual Cave Use with Special Reference to Naj Tunich, Petén, Guatemala. PhD dissertation, Department of Anthropology, University of California, Los Angeles.  
 1992 Function and Meaning of Lowland Maya Shoe-Pots. *Cerámica de Cultura Maya* 16:1-10.  
 1994 El Impacto del Ritual en la Economía Maya. VII Simposio de Investigaciones Arqueológicas en Guatemala. Pp. 87-91. Guatemala City: Ministerio de Cultura y Deportes.  
 1997 Settlement Configuration and Cosmology: The Role of Caves at Dos Pilas. *American Anthropologist* 99(3):602-18.  
 2001 Caves as Ancient Maya Pilgrimage Centers: Archaeological Evidence of a Multifaceted Role. *In Pilgrimage and the Ritual Landscape in Pre-Columbian America*. John Carlson, ed. Dumbarton Oaks Research Library and Collection, Washington, D.C. (in press).  
 2003 La Importancia de las Cuevas Artificiales para el Entendimiento de los Espacios Sagrados en Mesoamérica. *In Espacios Mayas: Usos, Representaciones, Creencias*. Alain Breton, Aurore Monod Becquelin and Mario Humberto Ruz, eds. Pp. 143-160. Mexico City: Centre D'Études Mexicaines et Centraméricaines.  
 2005a The Impact of Ritual on Ancient Maya Economy. *In Stone Houses and Earth Lords: Maya Religion in the Cave Context*. Keith Prufer and James Brady, eds. Pp. 115-34. Boulder: University of Colorado Press.

- 2005b The Architectural Cave as an Early Form of Artificial Cave in the Maya Lowlands. Paper presented at the Annual Meeting of the Society for American Archaeology, Salt Lake City.
- Brady, James and Wendy Ashmore  
 1999 Mountains, Caves, Water: Ideational Landscapes of the Ancient Maya. *In* Archaeologies of Landscape: Contemporary Perspectives. Wendy Ashmore and A. Bernard Knapp, eds. Pp. 124-148. Oxford: Blackwell Publishers Ltd.
- Brady, James; Joseph Ball; Ronald Bishop; Duncan Pring; Norman Hammond; and Rupert Housley  
 1998 The Lowland Maya "Protoclassic": A Reconsideration of its Nature and Significance. *Ancient Mesoamerica* 9(1):17-38.
- Brady, James and Polly Peterson  
 n.d. Re-Envisioning Ancient Maya Ritual Assemblages. Unpublished MS, Southern Illinois University.
- Brady, James and Keith Prufer  
 2005 Introduction: A History of Mesoamerican Cave Interpretation. *In* In the Maw of the Earth Monster: Mesoamerican Ritual Cave Use. James Brady and Keith Prufer, eds. Pp. 1-17. Austin: University of Texas Press.
- Brady, James and Ann Scott  
 1997 Excavations in Buried Cave Deposits: Implications for Interpretation. *Journal of Cave and Karst Studies* 59(1):15-21.
- Brady, James; Ann Scott; Alan Cobb; Irma Rodas; John Fogarty; and Monica Urquizú Sánchez  
 1997 Glimpses of the Dark Side of the Petexbatun Project: The Petexbatun Regional Cave Survey. *Ancient Mesoamerica* 8(2):353-64.
- Brady, James and George Veni  
 1992 Man-Made and Pseudo-Karst Caves: The Implications of Subsurface Features within Maya Centers. *Geoarchaeology* 7(2):149-67.
- Brady, James; George Veni; Andrea Stone; and Alan Cobb  
 1992 Explorations in the New Branch of Naj Tunich: Implications for Interpretations. *Mexicon* 16(4):74-81.
- Brasseur de Bourbourg, Charles  
 1861 Popol Vuh. Le Livre Sacré et les mythes de l'antiquité américaine, avec les livres héroïques et historiques des Quichés. Paris.

Bricker, Victoria

- 1997a The Structure of Almanacs in the Madrid Codex. *In Papers on the Madrid Codex*. Victoria Bricker and Gabrielle Vail, eds. Pp. 1-26. Publication 64. New Orleans: Middle American Research Institute.
- 1997b The "Calendar-Round" Almanac in the Madrid Codex. *In Papers on the Madrid Codex*. Victoria Bricker and Gabrielle Vail, eds. Pp. 169-80. Publication 64. New Orleans: Middle American Research Institute.

Burkitt, Robert

- 1930a Excavations at Chocolá (Guatemala). *Museum Journal* 21:5-40.
- 1930b Explorations in the Highlands of Western Guatemala. *Museum Journal* 21:41-72.

Butler, Mary

- 1940 A Pottery Sequence from the Alta Verapaz, Guatemala. *In The Maya and Their Neighbors*. C. Hay, ed. Pp. 250-67. New York: Appleton-Century.

Callaghan, Michael

- 2005 Cerámica del Proyecto Arqueológico Holmul, muestras de 2004 y 2005. *In Investigaciones arqueológicas en la región de Holmul, Petén, Guatemala: Informe preliminar de la temporada 2005*. Francisco Estrada-Belli, ed. Pp. 225-328. Nashville: Vanderbilt University Press.

Carot, Patricia

- 1976 Étude comparée des grottes de Candelaria, Julik et Bombil Pec. *Spelunca* 3 (suplemento):25-31.
- 1980 L'Occupation Préhispanique des Grottes de L'Alta Verapaz. *Bulletin de la Mission Archeologique et Ethnologique Francaise au Mexique* 2: 13-19. Mexico.
- 1982a L'occupation préhispanique des grottes de l'Alta Verapaz. *Journal de la Société des Américanistes* 68:27-32.
- 1982b La Ocupación Prehispanica de las Cuevas de Alta Verapaz. *Anales de la Academia de Geografía e Historia de Guatemala* 58:161-165.
- 1987 Archeologie des grottes du nord de l'Alta Verapaz. MA thesis, Department of Anthropology, Université Paris I.
- 1989 Arqueología de las cuevas del norte de Alta Verapaz. *Cuadernos de Estudios Guatemaltecos I*. Mexico City: Centre D'Étudies Mexicaines et Centraméricaines.

Carr, Robert and James Hazard

- 1961 Map of the Ruins of Tikal, El Petén, Guatemala. *Tikal Reports No. 11*. Philadelphia: University of Pennsylvania Press.

Chase, Arlen

- 1984 Ceramic Complexes of the Tayasal-Paxcaman Zone, Lake Peten, Guatemala. *Cerámica de cultura maya* 13:27-41.

- Chase, Arlen and Diane Chase  
 1997 Southeast Sector Settlement, a Stucco Statue, and Substantial Survey: The Caracol 1997 Season. Electronic document, <http://www.famsi.org/reports/96014/index.html>, accessed January 30, 2007.
- Coe, Michael  
 1961 *La Victoria: An Early Site on the Pacific Coast of Guatemala*. Papers 53. Cambridge, MA: Harvard University Press.  
 1974 A carved wooden box from the Classic Maya civilization. *In* *Primera Mesa Redonda de Palenque, Part 1, 1973*. Merle Greene Robertson, ed. Pp. 51-58. Pebble Beach, CA: Robert Louis Stevenson School, Pre-Columbian Art Research.  
 1988 Ideology of the Maya Tomb. *In* *Maya Iconography*. Elizabeth Benson and Gillett Griffin, eds. Pp. 222-35. Princeton: Princeton University Press.
- Coe, William and William Haviland  
 1982 Introduction to the Archaeology of Tikal, Guatemala. Tikal Report No. 12. Philadelphia: University of Pennsylvania.
- Coggins, Clemency and Orrin Shane III, eds.  
 1984 *Cenote of Sacrifice: Maya Treasures from the Sacred Well at Chichén Itzá*. Austin: University of Texas Press.
- Crone, Patricia  
 1987 *Meccan Trade and the Rise of Islam*. Oxford: Blackwell.
- Culbert, T. Patrick  
 1967 Preliminary Report of the Conference on the Prehistoric Ceramics of the Maya Lowlands (1965). *Estudios de Cultura Maya* 5:81-109.  
 n.d. The Ceramics of Tikal. Unpublished MS, Department of Anthropology, University of Arizona.
- Culbert, T. Patrick and Robert Rands  
 n.d. Multiple Classifications: An Alternative Approach to the Investigation of Maya Ceramics. Unpublished MS, Department of Anthropology, University of Arizona.
- Demarest, Arthur  
 1984 Conclusiones y especulaciones acerca de El Mirador. *Mesoamérica* 7:138-50.  
 1986 *The Archaeology of Santa Leticia and the Rise of Maya Civilization*. Middle American Research Institute, Publication 52. New Orleans: Tulane University.

- 1992 Ideology in Ancient Maya Cultural Evolution: The Dynamics of Galactic Politics. *In* Ideology and Pre-Columbian Civilizations. Arthur Demarest and Geoffrey Conrad, eds. Pp. 135-57. Santa Fe: School of American Research.
- 1997 The Vanderbilt Petexbatun Regional Archaeological Project 1989:1994: Overview, History, and Major Results of a Multidisciplinary Study of the Classic Maya Collapse. *Ancient Mesoamerica* 8(2):209-28.
- 2006 The Petexbatun Regional Archaeological Project: A Multidisciplinary Study of the Maya Collapse. Vanderbilt Institute of Mesoamerican Archaeology Volume 1. Nashville: Vanderbilt University Press.

Demarest, Arthur and Federico Fahsen

- 2002 Nuevos datos e interpretaciones de los reinos occidentales del Clásico Tardío: Hacia una visión sintética de la historia Pasión-Usumacinta. Paper presented at the XVI Simposio de Investigaciones Arqueológicas en Guatemala.

Dieseldorff, E.

- 1894 A Pottery Vase with Figure Painting from a Grave in Chama. *Bulletin* 28. Pp. 639-44. Washington: Bureau of American Ethnology.

Dillon, Brian

- 1975 Notes on Trade in Ancient Mesoamerica. *In* Contributions of the University of California Archaeological Research Facility Number 24 Pp. 80-135. Berkeley: Archaeological Research Facility, University of California.
- 1978 A Tenth Cycle Sculpture from Alta Verapaz, Guatemala. *Contributions of the Archaeological Research Facility* 36. Berkeley: University of California.
- 1979 The Archaeological Ceramics of Salinas de los Nueve Cerros, Alta Verapaz, Guatemala. PhD dissertation, Department of Anthropology, University of California, Berkeley.
- 1985 Preface to the English Edition. *In* The Verapaz in the Sixteenth and Seventeenth Centuries: A Contribution to the Historical Geography and Ethnography of Northeastern Guatemala. Theodore Gutman, trans. Pp. i-vii. Occasional Paper 13. Los Angeles: Institute of Archaeology, University of California.

Dillon, Brian; L. Bruner; and Kevin Pope

- 1985 Ancient Maya Autoamputation? A Possible Case from Salinas de los Nueve Cerros, Guatemala. *Journal of New World Archaeology* 5(4):24-38.

Dominguez Carrasco, Maria

- 1994 Calakmul, Campeche: Análisis de la cerámica. Campeche, Mexico: Universidad Autónoma de Campeche.



- Douglas, Mary  
 1973 *Natural Symbols: Explorations in Cosmology*. New York: Vintage Books.
- Dreux, Daniel  
 1968 *La espeleología en Guatemala*. Guatemala: Expediciones Espeleológicas Francesas en Guatemala.  
 1973 *La speleologie au Guatemala*. *Speleologia Emiliana Serie II* 5(7) :21-46.  
 1974 *Recherches en Alta Verapaz (1968-1974)*. Paris: CERSMT.  
 1978 *Guatemala: Dans les gouffres du pays maya*. Paris: Presses de la Cité.
- Dunham, Peter and Keith Prufer  
 1998 *En la cumbre del clásico: Descubrimientos recientes en la Montaña Maya en el sur de Belice*. *In XI Simposio de Investigaciones Arqueológicas en Guatemala*. Pp. 165-70. Guatemala City: Asociación Tikal.
- Dunnell, Robert  
 1971 Sabloff and Smith's "The Importance of Both Analytic and Taxonomic Classification in the Type-Variety System." *American Antiquity* 36(1):115-8.
- Durkheim, Emile  
 1995 *The Elementary Forms of Religious Life*. Karen Fields, trans. New York: The Free Press.
- Eliade, Mircea  
 1964 *Shamanism: Archaic Techniques of Ecstasy*. Willard Trask, trans. Princeton: Princeton University Press.
- Fahsen, Federico  
 2002 *Rescuing the Origins of the Dos Pilas Dynasty: A Salvage of Hieroglyphic Stairway #2, Structure L5-49*. Electronic document, <http://www.famsi.org/reports/01098/index.html>, accessed February 5, 2007.
- Fahsen, Federico; Sarah Jackson; Ian Graham; Arthur Demarest; y Tomas Barriéntos  
 2001 *Nuevos datos e interpretaciones sobre la dinastía de Cancuen y otros reinos del sur de Petén durante el periodo Clásico*. Paper presented at the XV Simposio de Investigaciones Arqueológicas en Guatemala.
- FIIT (Fundación Interamericana de Investigación Tropical)  
 2001 *Estudio Técnico, Cuevas de Candelaria*. Unpublished MS, Departamento de Monumentos Prehispánicos, Guatemala.

Fischer, Edward

- 2001 *Cultural Logics and Global Economies: Maya Identity in Thought and Practice*. Austin: University of Texas Press.

Foias, Antonia

- 1996 *Changing Ceramic Production and Exchange Systems and the Classic Maya Collapse in the Petexbatun Region*. PhD dissertation, Department of Anthropology, Vanderbilt University, Nashville, TN.

Folan, William J.

- 1974 *The Cenote Sagrado of Chichén Itzá, Yucatán, México, 1967-68: The Excavation, Plans, and Preparations*. *The International Journal of Nautical Archaeology and Underwater Exploration* 3(2):283-93.

Forné, Melanie

- 2005 *La chronologie céramique de La Joyanca, nord-ouest du Petén, Guatemala*. PhD dissertation, Department of Anthropology, Université Paris I.

Förstemann, Ernst

- 1896 *Erläuterungen zur Mayahandschrift der Königlichen Öffentlichen Bibliothek zu Dresden*. Dresden: Warnatz und Lehmen.  
1898 *De Tagegötter der Mayas*. *Globus* 73:137-40, 162-4.

Forsyth, Donald

- 1980 *Report on Some Ceramics from the Peten, Guatemala*. In *El Mirador, Peten, Guatemala: An Interim Report*. Ray Matheny, ed. Pp. 59-82. *Papers of the New World Archaeological Foundation*, vol. 45. Provo: Brigham Young University Press.  
1983 *Investigations at Edzna, Campeche, Mexico, Vol. 2: Ceramics*. *Papers of the New World Archaeological Foundation* No. 46. Provo, Utah: Brigham University Press.  
1989 *The Ceramics of El Mirador, Petén, Guatemala*. *Papers of the New World Archaeological Foundation*, No. 63. Provo, Utah: Brigham Young University Press.

Frazer, James

- 1935 *The Golden Bough, Third Edition*. London: Macmillan.

Freidel, David; Linda Schele; and Joy Parker

- 1994 *Maya Cosmos: Three Thousand Years on the Shaman's Path*. New York: William Morrow Press.

French, Kirk

- 2002 *Creating Space through Water Management at the Classic Maya Site of Palenque, Chiapas, Mexico*. MA thesis, Department of Anthropology, University of Cincinnati.

- Fuentes Y Guzmán, Francisco  
 1957 Preceptos históricos. Guatemala City: Editorial del Ministerio de Educación Pública.
- Gage, Thomas  
 1958 Thomas Gage's Travels in the New World. J. Eric S. Thompson, ed. Norman: University of Oklahoma Press.
- Gann, Thomas and J. Eric S. Thompson  
 1931 History of the Maya from the Earliest Times to the Present Day. New York: Charles Scribner's Sons.
- García, David and Arthur Demarest  
 2004 Patrimonio cultural en manos comunitarias: Oportunidades y retos para la preservación y el co-manejo. *In XVII Simposio de Investigaciones Arqueológicas en Guatemala, 2003*. Juan Pedro Laporte, Héctor Escobedo, Bárbara Arroyo, and Héctor Mejía, eds. Guatemala City: Museo Nacional de Arqueología y Etnología.
- García Cruz, F.  
 1991 Aktunkin: A Maya Cavern in Campeche. *Mexicon* 13:45.
- García-Zambrano, Ángel  
 1994 Early Colonial Evidence of Pre-Columbian Rituals of Foundation. *In Seventh Palenque Round Table, 1989*. Meerle G. Robertson and Virginia Fields, eds. Pp. 217-27. San Francisco: Precolumbian Art Research Institute.
- Geertz, Clifford  
 1980 Negara: The Theatre State in Nineteenth-Century Bali. Princeton: Princeton University Press.
- Gendrop, Paul  
 1980 Dragon Mouth Entrances: Zoomorphic Portals in the Architecture of Central Yucatan. *In Third Palenque Round Table 1978, Part 2*. Merle Greene Robertson, ed. Pp. 138-50. Austin: University of Texas Press.
- van Gennep, Arnold  
 1960 The Rites of Passage. Michaela Vizedom and Mari Caffee, trans. Chicago: University of Chicago Press.
- Giddens, Anthony  
 1979 Central Problems in Social Theory: Action, Structure, and Contradiction in Social Analysis. Berkeley: University of California Press.

- Gifford, James  
 1976 Prehistoric Pottery Analysis and the Ceramics of Barton Ramie in the Belize Valley. *Memoirs of the Peabody Museum of Archaeology and Ethnology*, Vol. 18. Cambridge, M.A.: Harvard University Press.
- Godelier, Maurice  
 1999 *The Enigma of the Gift*. N. Scott, trans. Chicago: The University of Chicago Press.
- Gordon, George  
 1898 Caverns of Copan, Honduras. *Memoirs of the Peabody Museum of American Archaeology and Ethnology*, volume 1, number 5. Pp. 137-48. Cambridge: Harvard University Press.
- Graham, Ian  
 1965 Tres Islas. Unpublished MS, Ministerio de Cultura y Deportes, Guatemala.  
 1967 Archaeological Explorations in El Petén, Guatemala. Publication 33. Middle American Research Institute. New Orleans: Tulane University.
- Graham, John  
 1973 Aspects of Non-Classic Presences in the Inscriptions and Sculptural Art of Seibal. *In* *The Classic Maya Collapse*. T. Patrick Culbert, ed. Pp. 207-19. Santa Fe: School for American Research.
- Halifax, Joan  
 1982 *Shaman, the Wounded Healer*. New York: Crossroad Press.
- Halperin, Christina; Sergio Garza; Keith Prufer; and James Brady  
 2003 Caves and Maya Ritual Use of Jute. *Latin American Antiquity* 14(2):207-220.
- Hammond, Norman  
 1972a Obsidian Trade Routes in the Mayan Area. *Science* 178:1092-3.  
 1972b A Minor Criticism of the Type-Variety System of Ceramic Analysis. *American Antiquity* 37(3):450-2.  
 1978 Cacao and Cobaneros: An Overland Trade Route between the Maya Highlands and Lowlands. *In* *Mesoamerican Communication routes and Cultural Contacts*. Thomas Lee and Carlos Navarrete, eds. Pp. 19-26. *New World Archaeological Foundation Papers* 40. Provo: Brigham Young Press.  
 1981 Settlement Patterns in Belize. *In* *Lowland Maya Settlement Patterns*. Wendy Ashmore, ed. Pp. 157-86. Albuquerque: University of New Mexico Press.

- 1991 Inside the Black Box: Defining Maya Polity. *In* Classic Maya Political History. T. Patrick Culbert, ed. Pp. 253-84. Cambridge: Cambridge University Press.
- Hatch, Marion  
 1997 Kaminaljuyu/San Jorge: Evidencia arqueológica de la actividad económica en el Valle de Guatemala. Guatemala City: Universidad del Valle de Guatemala.
- Heinz, Marco  
 1993 Ethnizität und ethnische Identität: Eine Begriffsgeschichte. Bonn: Hologos.
- Hermes, Bernard  
 1984 Adiciones tipológicas a los Complejos Eb, Tzec y Manik de Tikal. Informe, Proyecto Nacional Tikal, Guatemala.
- Heyden, Doris  
 1973 ¿Un Chicomostoc en Teotihuacan? La cueva bajo de la Pirámide del Sol. Instituto Nacional de Antropología e Historia Boletín 6:3-18.  
 1975 An Interpretation of the Cave Underneath the Pyramid of the Sun in Teotihuacan, Mexico. *American Antiquity* 40(2):131-47.
- Holley, George  
 1983 Ceramic Change at Piedras Negras, Guatemala. PhD dissertation, Department of Anthropology, Southern Illinois University at Carbondale.
- Houston, Stephen  
 1987 The Inscriptions and Monumental Art of Dos Pilas, Guatemala: A Study of Classic Maya History and Politics. PhD dissertation, Department of Anthropology, Yale University, New Haven, CT.  
 2006 Impersonation, Dance, and the Problem of Spectacle among the Classic Maya. *In* Archaeology of Performance: Theaters of Power, Community, and Politics. Takeshi Inomata and Lawrence Coben, ed. Pp. 135-55. New York: AltaMira Press.
- Houston, Steven and Peter Mathews  
 1985 The Dynastic Sequence of Dos Pilas, Guatemala. Monograph 1. San Francisco: Pre-Columbian Art Research Institute.
- Hubert, Henri and Marcel Mauss  
 1953 Interpretation of the Sacrificial Ceremony. *In* Primitive Heritage. Margaret Mead, ed. Pp. 66-72. New York: Random House.

Humphrey, Carolina

- 1995 Chiefly and Shamanic Landscapes in Mongolia. *In* The Anthropology of Landscape: Perspectives on Place and Space. Eric Hirsch and Michael O'Hanlon, ed. Pp. 135-62. Oxford: Clarendon Press.

Ichon, Alain

- 1977 Les sculptures de La Lagunita, El Quiché, Guatemala. Guatemala: Ed. Piedra Santa.
- 1987 Regional Ceramic Development in El Quiche and Baja Verapaz, Guatemala. *In* Maya Ceramics: Papers from the 1985 Maya Ceramic Conference, Part II. Prudence Rice and Robert Sharer, eds. Pp. 277-306. Oxford: BAR.
- 1992 Los Cerritos-Chijoj: La transición epiclásica en las Tierras Altas de Guatemala. Paris: Centre D'Études Mexicaines et Centraméricaines.

Ichon, Alain and Marie Charlotte Arnauld

- 1985 Le Protoclassique á La Lagunita, el Quiché, Guatemala. Paris: Institut d'Ethnologie.

Ichon, Alain and Rita Cheesman

- 1983 Archéologie de sauvetage 5: Les sites classiques de la Vallée Moyenne du Chixoy. Paris : Institut d'Ethnologie.

Ichon, Alain and Marion Hatch

- 1980 Archéologie de sauvetage dans la vallée du Río Chixoy, vol. 4: Los Encuentros. Paris: Centre National de la Recherche Scientifique.

Ichon, Alain and René Viel

- 1984 La Periode Formative à La Lagunita et dans le Quiché méridional, Guatemala. Paris: Institut d'Ethnologie.

Inomata, Takeshi

- 2006 Politics and Theatricality in Mayan Society. *In* Archaeology of Performance: Theaters of Power, Community, and Politics. Takeshi Inomata and Lawrence Coben, eds. Pp. 187-222. New York: AltaMira Press.

Insoll, Timothy

- 2004 Archaeology, Ritual, Religion. London: Routledge Press.

Instituto Geográfico Nacional

- 1978 Diccionario Geográfico de Guatemala; compilación crítica de Francis Gall. Tomo 1. Guatemala: Instituto Geográfico Nacional.

- Ishihara, Reiko  
 2007 Bridging the Chasm between Religion and Politics: Archaeological Investigations of the Grietas at the Late Classic Maya Site of Aguateca, Petén, Guatemala. PhD dissertation, Department of Anthropology, University of California, Riverside.
- Ivanoff, Pierre  
 1968 Découvertes chez les mayas. Paris: Robert Laffont.
- James, E.O.  
 1955 The Nature and Functions of the Priesthood. London: Thames and Hudson.
- Jennings, Theodore  
 1982 On Ritual Knowledge. *Journal of Religion* 62(2):111-27.
- Johnston, Kevin  
 1994 Invisible Maya: Late Classic Minimally-Platformed Residential Settlement at Itzán, Petén, Guatemala. PhD. Dissertation, Department of Anthropology, Yale University.
- Joyce, Thomas  
 1929 Report on the British Museum Expedition to British Honduras. *Journal of the Royal Anthropological Institute* 59:439-59.
- Joyce, Thomas; Thomas Gann; E.L. Gruning; and C.E. Long  
 1928 Report on the British Museum Expedition to British Honduras. *Journal of the Royal Anthropological Institute* 58:323-49.
- Kauffman, Donald  
 1967 The Dictionary of Religious Terms. Westwood, N.J.: Fleming H. Revell Company.
- Kendall, Carl  
 1991 The Politics of Pilgrimage: The Black Christ of Esquipulas. *In* Pilgrimage in Latin America N. Ross Crumrine and Alan Morinis, eds. Pp. 139-56. New York: Greenwood Press.
- Kenward, Amalia  
 2005 Showing the Way : The Function of Three Small Caves in the Sibun-Manatee Karst. *In* Stone Houses and Earth Lords: Maya Religion in the Cave Context. Keith Prufer and James Brady, eds. Pp. 249-59. Boulder: University of Colorado Press.
- Kertzer, David  
 1988 Ritual, Politics, and Power. New Haven: Yale University Press.

Kidder, Alfred

1937 Annual Report of the Division of Historical Research. Yearbook No. 36 for the Year 1936-37. Washington, DC: Carnegie Institution of Washington.

1944 Annual Report of the Chairman of the Division of Historical Research. Yearbook No. 43, for the Year 1943-44. Washington, DC: Carnegie Institution of Washington.

Kidder, Alfred; Jesse Jennings; and Edwin Shook

1946 Excavations at Kaminaljuyu. Carnegie Institution of Washington Publication 561. Washington, D.C.: Carnegie Institution of Washington.

King, Arden

1974 Coban and the Verapaz; History and Cultural Process in Northern Guatemala. Publication 37. New Orleans: Middle American Research Institute.

Klein, Cecelia; Eulogio Guzman; Elisa Mandell; Maya Stanfield-Mazzi; Josephine Volpe

2001 Shamanitis: A Pre-Columbian Art Historical Disease. *In* The Concept of Shamanism: Uses and Abuses. Henri-Paul Francfort and Roberte Hamayon, eds. Pp. 207-241. Budapest: Akadémiai Kiadó.

Knapp, A. Bernard and Wendy Ashmore

1999 Archaeological Landscapes: Constructed, Conceptualized, Ideational. *In* Archaeologies of Landscape: Contemporary Perspectives. Wendy Ashmore and A. Bernard Knapp, eds. Pp. 1-30. Oxford: Blackwell Publishers Ltd.

Kosakowsky, Laura

1987 Preclassic Maya Pottery at Cuello, Belize. Anthropological Papers of the University of Arizona, No. 47. Tuscon: University of Arizona Press.

Kovacevich, Brigitte

2003 Sistemas económicos y producción maya: nuevos datos y retos en Cancuen. XVII Simposio de Investigaciones Arqueológicas en Guatemala. Guatemala City: Ministerio de Cultura y Deportes.

2006 Reconstructing Classic Maya Economic Systems: Production and Exchange at Cancuen, Guatemala. Ph.D. dissertation, Department of Anthropology, Vanderbilt University, Nashville, TN.

Kubler, George

1974 Mythological Ancestries in Classic Maya Inscriptions. *In* Primera Mesa Redonda de Palenque, Part 1. Merle Greene Robertson, ed. Pp. 23-44. Pebble Beach, CA: Pre-Columbian Art Research Institute.



- 1985 Pre-Columbian Pilgrimages in Mesoamerica. *In* Fourth Palenque Round Table, 1980, Vol. VI. Elizabeth P. Bensen, ed. Pp. 313-316. San Francisco: Pre-Columbian Art Research Institute.

de Landa, Diego

- 1978 Yucatan Before and After the Conquest. William Gates, trans. New York: Dover Publications.

Laporte, Juan Pedro

- 1989 Alternativas del Clásico Temprano en la relación Tikal-teotihuacan: Grupo 6C-XVI, Tikal, Petén, Guatemala. PhD dissertation, Department of Archaeology Universidad Nacional Autónoma de México.
- 1995a Una actualización a la secuencia cerámica del Area de Dolores, Petén. *In* Atlas Arqueológico de Guatemala, No. 3. Julio Roldán, Jorge Mario Samayoa, and Juan Pedro Laporte, eds. Guatemala City: Ministerio de Cultura y Deportes.
- 1995b ¿Desplamamiento o problema analítico? El Clásico Temprano en el sureste de Petén. *In* VIII Simposio de Investigaciones Arqueológicas en Guatemala, 1994. Pp. 729-62. Guatemala: Museo Nacional de Arqueología y Etnología.

Laporte, Juan Pedro and Lilian Corzo

- 2002 La secuencia preclásica del sureste de Petén: Tipos, cifras, localidades y el desarrollo del asentamiento. *In* XV simposio de investigaciones arqueológicas en Guatemala. Pp. 505-529. Guatemala City: Ministerio de Cultura y Deportes.

Laporte, Juan Pedro; Lilian Corzo; Héctor Escobedo; Rosa María Flores, K. Isabel Izaguirre, Nancy Monterroso, Paulino Morales, Carmen Ramos, Irma Rodas, Julio Roldán, Franklin Solares, and Bernard Hermes

- 1993 La secuencia cerámica del Valle de Dolores, Petén: Las unidades cerámicas. Atlas Arqueológico de Guatemala No. 1. Guatemala City: Ministerio de Cultura y Deportes.

Laporte, Juan Pedro and Héctor Mejía

- 2005 Ixkun, Petén, Guatemala: Exploraciones en una Ciudad del Alto Mopán 1985-2005. Dolores, Petén, Guatemala: Atlas Arqueológico de Guatemala.

Leach, Edmund

- 1968 Ritual. *In* International Encyclopedia of the Social Sciences, Vol. 13. David Sills, ed. Pp. 520-6. New York: Macmillan.

Lessa, William and Evon Vogt

- 1972 Reader in Comparative Literature (Third Edition). New York: Harper and Row.

- López Varela, Sandra  
 1989 Análisis y clasificación de la cerámica de un sitio maya del Clásico: Yaxchilan, México. BAR International Series no. 535. Oxford: BAR.
- Lothrop, Samuel  
 1933 Archaeology of the Guatemala Highlands. *In* Carnegie Institution of Washington, Year Book 32. Pp. 96. Washington, D.C.: Carnegie Institution of Washington.
- Lounsbury, Floyd  
 1978 Some Problems in the Interpretation of the Mythological Portion of the Hieroglyphic Text at the Temple of the Cross at Palenque. *In* Tercera Mesa Redonda de Palenque. Merle Greene Robertson and Donnan Jeffers, eds. Pp. 99-115. Monterrey: Pre-Columbian Art Research Center.
- Lucero, Lisa  
 1999 Water Control and Maya Politics in the Southern Maya Lowlands. *In* Complex Polities in the Ancient Tropical World. E. Bacus and Lisa Lucero, eds. Archaeological Papers 9, Washington, DC: American Anthropological Association.  
 2002 Collapse of the Classic Maya: A Case for the Role of Water Control. *American Anthropologist* 104(3):814-26.
- MacLeod, Barbara and Dennis Puleston  
 1978 Pathways into Darkness: The Search for the Road to Xibalbá. Tercera Mesa Redonda de Palenque, Vol. 4. Merle Greene Robertson and Donnan Call Jeffers, eds. Pp. 71-77. Monterey, CA: Herald Peters.
- McAnany, Patricia  
 1995 Living with the Ancestors: Kinship and Kingship in Ancient Maya Society. Austin: University of Texas Press.
- McAnany, Patricia, ed.  
 2002 Sacred Landscape and Settlement in the Xibun River Valley, XARP 1999 Archaeological Survey and Excavation. Albany: University of Albany Press.
- Maler, Teobert  
 1908 Explorations of the upper Usumatsintla and Adjacent Region: Altar de Sacrificios; Seibal; Itsimté-Sácluk; Cankuen. *Memoirs* 4(2). Cambridge: Peabody Museum of Archaeology and Ethnology.
- Malinowsky, Bronislaw  
 1984 Magic, Science, and Religion and other Essays. Westport, CT: Greenwood Press.

- Manz, Beatriz  
 2004 *Paradise in Ashes: A Guatemalan Journey of Courage, Terror, and Hope.* Berkeley: University of California Press.
- Manzanilla, Linda; Claudia López; and AnnCorinne Freter  
 1996 Dating Results from Excavations in Quarry Tunnels underneath the Pyramid of the Sun at Teotihuacan. *Ancient Mesoamerica* 7(2):245-66.
- Mata Amado, Guillermo  
 1974 Arqueología subacuática: Amatitlán, Guatemala. *Anales de la Sociedad de Geografía e Historia de Guatemala* 47:239-49.
- Mathews, Peter  
 1979 The Inscription on the Back of Stela 8, Dos Pilas, Guatemala. Unpublished MS, Department of Anthropology, University of Calgary, Alberta, Canada.
- Mathews, Peter and Gordon Willey  
 1991 Prehistoric Polities of the Pasion Region. *In Classic Maya Political History: Hieroglyphic and Archaeological Evidence.* T. Patrick Culbert, ed. Pp. 30-71. Cambridge: Cambridge University Press.
- Martin, Simon  
 2001 Under a Deadly Star—Warfare among the Classic Maya. *In Maya: Divine Kings of the Rain Forest.* Nikolai Grube, ed. Pp. 24-49. Cologne, Germany: Könemann.
- Martin, Simon and Nikolai Grube  
 2000 *Chronicle of the Maya Kings and Queens: Deciphering the Dynasties of the Ancient Maya.* London: Thames and Hudson Press.
- Martínez Marín, Carlos  
 1972 Santuarios y Peregrinaciones en el México Prehispánico. *In Religión en Mesoamérica.* Jaime Litvak King and Noemí Castillo Tejeros, eds. Pp. 161-76. Mexico City: Sociedad Mexicana de Antropología.
- Maudslay Ann and Alfred Maudslay  
 1889 *A Glimpse at Guatemala, and Some notes on the Ancient Monuments of Central America.* London: J. Murray.
- Mauss, Marcel  
 1967 *The Gift: Forms and Functions of Exchange in Archaic Societies.* Ian Cunnison, trans. New York: Norton.

- Mendoza, Ruben  
 1977 World View and the Monolithic Temples of Malinalco, Mexico: Iconography and Analogy in Pre-Columbian Architecture. *Société des Américanistes* 64:63-80.
- Mercer, Henry  
 1975 The Hill-Caves of Yucatan. Norman: University of Oklahoma Press.
- Monaghan, John  
 1995 Covenants with Earth and Rain: Exchange, Sacrifice, and Revelation in Mixtec Sociality. *Civilizations of the American Indian Series*, 219. Norman: University of Oklahoma Press.
- Monterroso, Mirza  
 2005 Excavaciones en La Lima, Alta Verapaz, Guatemala. In *Proyecto Arqueológico Cancuen Informe Preliminar no. 6*. Nashville, TN: Vanderbilt University Press.  
 2006 El sitio Arqueológico La Lima, Chisec, Alta Verapaz, durante el Clásico Tardío (600-900 d.C.). Licenciatura thesis, Department of Archaeology, Universidad de San Carlos de Guatemala.
- Monterroso, Mirza and Brent Woodfill  
 2006 Evidence of Local Ceramic Production in the Candelaria Caves, Alta Verapaz, Guatemala. Paper presented at the Society for American Archaeology Meetings, San Juan, Puerto Rico.
- Morán, Lucía and Karen Pereira  
 2003 Excavaciones en Raxruha Viejo. *In Proyecto Arqueológico Cancuen Informe Preliminar No. 4*. Nashville: Vanderbilt University Press.
- Morehart, Christopher  
 2005 Plants and Caves in Ancient Maya Society. *In Stone Houses and Earth Lords: Maya Religion in the Cave Context*. Keith Prufer and James Brady, eds. Pp. 167-86. Boulder: University of Colorado Press.
- Morinas, Alan and N. Ross Crumrine  
 1991 La Peregrinación: The pilgrimage in Latin America. *In Pilgrimage in Latin America*. N. Ross Crumrine and Alan Morinas, eds. Pp. 1-17. Westport, CT: Greenwood Press.
- Morley, Sylvanus  
 1935 Guide Book to the Ruins of Quirigua. Supplementary Publication 16. Washington, D.C.: Carnegie Institution of Washington.  
 1937 The Inscriptions of the Peten. Publication 437. Washington, DC: Carnegie Institute of Washington.  
 1946 Ancient Maya. Stanford: Stanford University Press

Moyes, Holly

- 2000 Cave as a Cosmogram: Function and Meaning of Maya Speleothem Use. *In* *The Sacred and the Profane: Architecture and Identity in the Maya Lowlands*. Pierre Colas, Kai Delvendahl, Marcus Kuhnert, and Annette Schubart, eds. Pp. 137-48. Munich: Verlag Anton Saurwein.
- 2005 Cluster Concentrations, Boundary Markers, and Ritual Pathways: A GIS Analysis of Artifact Cluster Patterns at Actun Tunichil Muknal. *In* *In the Maw of the Earth Monster: Mesoamerican Ritual Cave Use*. James Brady and Keith Prufer, eds. Pp. 269-300. Austin: University of Texas Press.

von Nagy, Christopher

- 1997 Some Comments on the Madrid Deer-Hunting Almanacs. *In* *Papers on the Madrid Codex*. Victoria Bricker and Gabrielle Vail, eds. Pp. 27-72. Publication 64. New Orleans: Middle American Research Institute.

Navarrette, Carlos and L. Lujan

- 1963 Reconocimiento arqueológico de sitio de Dos Pilas, Petexbatun, Guatemala. *Cuadernos de Antropología* 2. Guatemala: Universidad de San Carlos.

Nielsen, Axel

- 2001 Ethnoarchaeological Perspectives on Caravan Trade in the South-Central Andes. *In* *Ethnoarchaeology of Andean South America: Contributions to Archaeological Method and Theory*. Lawrence Kuznar, ed. Pp. 163-201. Ann Arbor: International Monographs in Prehistory.

O'Mansky, Matt

- 2003 Cancuen Regional Archaeological Project: Highland-Lowland Influence and Exchange along a Geographical Boundary. Electronic document, <http://www.famsi.org/reports/99089/index.html>, accessed February 10, 2007.

Océano

- 2000 Enciclopedia de Guatemala, Vol. I. Barcelona: Océano Grupo Editorial, S.A.

ODHAG (Oficina de Derechos Humanos del Arzobispado de Guatemala)

- 1998 Guatemala Nunca Más III: El Eterno Histórico. Guatemala City: ODHAG.

Ohnstad, Arik

- 2004 El proyecto regional Cancuen, Petén: La ruta entre el Altiplano Norte y Cancuen. *In* *XVIII Simposio de Investigaciones arqueológicas de Guatemala*. Guatemala City: Ministerio de Cultura y Deportes.

- Ortner, Sherry  
1978 *Sherpas through their Rituals*. Cambridge: Cambridge University Press.
- Palacios, Enrique  
1936 Incripcion recientemente descubierta en Palenque. *Maya Research* 3(1):3-17.
- Patel, Shankari  
2005 Pilgrimage and Caves on Cozumel. *In Stone Houses and Earth Lords: Maya Religion in the Cave Context*. Keith Prufer and James Brady, eds. Pp. 91-112. Boulder: University of Colorado Press.
- Pendergast, David  
1964 Excavaciones en la Cueva Eduardo Quiroz, Distrito Cayo, Honduras Británica. *Estudios de Cultura Maya* 4:119-39.  
1969 The Prehistory of Actun Balam, British Honduras. *Art and Archaeology Occasional Paper No. 16*. Toronto: Royal Ontario Museum.  
1971 Excavations at Eduardo Quiroz Cave, British Honduras (Belize). *Art and Archaeology Occasional Paper No. 21*. Toronto: Royal Ontario Museum.  
1974 Excavations at Actun Polbilche, Belize. *Royal Ontario Museum Monograph I*. Toronto: Royal Ontario Museum.
- Petersen, Andrew  
1994 The Archaeology of the Syrian and Iraqi Hajj Routes. *World Archaeology* 26(1):47-56.
- Peterson, Polly  
2006 Ancient Maya Cave Ritual Cave Use in the Sibun Valley, Belize. PhD Dissertation, Department of Archaeology, Boston University.
- Phillips, Philip  
1958 Application of the Wheat-Gifford-Wasley Taxonomy to Eastern Ceramics. *American Antiquity* 24(2):117-25.
- Pike, E. Royston  
1958 *Encyclopaedia of Religion and Religions*. New York: Meridinal Library.
- Polo Sifontes, Francis  
1979 *Título de Alotenango*. Guatemala City: Jose de Pineda Ibarra.
- Pope Kevin and Malcolm Sibberenson  
1981 In Search of Tzultacaj: Cave Explorations in the Maya Lowlands of Alta Verapaz, Guatemala. *Journal of New World Archaeology* 4(3): 16-54.

- Pring, Duncan  
 1977 The Preclassic Ceramics of Northern Belize. PhD dissertation, Department of Archaeology, London University, England.
- Proskouriakoff, Tatiana  
 1960 Historical Implications of a Pattern of Dates at Piedras Negras, Guatemala. *American Antiquity* 25:454-75.
- Prufer, Keith  
 1999 Analysis and Conservation of a Wooden Figurine Recovered from Xmuqlebal Xheton Cave in Southern Belize, C.A. Electronic document, <http://www.famsi.org/reports/06066/index.html>, accessed November 10, 2006.  
 2002 Communities, Caves, and Ritual Specialists: A Study of Sacred Space in the Maya Mountains of Southern Belize. PhD Dissertation, Department of Anthropology, Southern Illinois University, Carbondale.
- Prufer, Keith and James Brady  
 2005 Concluding Comments. *In* In the Maw of the Earth Monster: Mesoamerican Ritual Cave Use. James Brady and Keith Prufer, eds. Pp. 403-11. Austin: University of Texas Press.
- Prufer, Keith and Andrew Kindon  
 2005 Replicating the Sacred Landscape: The Chen at Muklebal Tzuul. *In* Stone Houses and Earth Lords: Maya Religion in the Cave Context. Keith Prufer and James Brady, eds. Pp. 25-46. Boulder: University of Colorado Press.
- Prufer, Keith; Phil Wanyerka; and Monica Shah  
 2003 Wooden Figurines, Scepters, and Religious Specialists in Pre- Columbian Maya Society. *Ancient Mesoamerica* 14:219-36.
- Pugh, Timothy  
 2005 Caves and Artificial Caves in Late Postclassic Maya Ceremonial Groups. *In* Stone Houses and Earth Lords: Maya Religion in the Cave Context. Keith Prufer and James Brady, eds. Pp. 47-69. Boulder: University of Colorado Press.
- Puleston, Dennis  
 1967 *Brosimum alicastrum* as a Subsistence Alternative for the Classic Maya of the Central Southern Lowlands. MA thesis, Department of Anthropology University of Pennsylvania, Philadelphia.  
 1983 Settlement Survey of Tikal. Tikal Report 13. Philadelphia: University of Pennsylvania Press.

- Radcliffe-Brown, Alfred  
1964 *The Andaman Islanders*. Glencoe: The Free Press.
- Ramírez, Álvaro and Brent Woodfill  
2004 Recomendaciones turísticas para las Cuevas de Candelaria. In *Proyecto Arqueológico Cancuen Informe Preliminar No. 5*. Nashville: Vanderbilt University Press.
- Rands, Robert  
1974 Ceramic Sequence at Palenque, Chiapas. In *Mesoamerican Archaeology: New Approaches*. Norman Hammond, ed. Pp. 51-75. Austin: University of Texas Press.  
1987 Ceramic Patterns and Traditions in the Palenque Area. In *Maya Ceramics: Papers from the 1985 Maya Ceramic Conference, Part I*. Prudence Rice and Robert Sharer, eds. Pp. 203-38. Oxford: BAR.
- Rands, Robert and Robert E. Smith  
1965 Pottery of the Guatemalan Highlands. In *Handbook of Middle American Indians, Volume 2: Archaeology of Southern Mesoamerica, Part 1*. Pp. 95-146. Austin: University of Texas Press.
- Rappaport, Roy  
1999 *Ritual and Religion in the Making of Humanity*. Cambridge: Cambridge University Press.
- Rathje, William and Jeremy Sabloff  
1973 Ancient Maya Commercial Systems: A Research Design for the Island of Cozumel, Mexico. *World Archaeology* 5(2):221-231.
- Recinos, Adrián  
1950 *Popol Vuh: The Sacred Book of the Ancient Quiché Maya*. Norman: University of Oklahoma Press.
- Redfield, Robert and Alfonso Villa Rojas  
1934 *Chan Kom, A Maya Village*. Carnegie Institution of Washington Publication No. 448. Washington, DC: Carnegie Institution of Washington.
- Reents-Budet, Dorie and Barbara MacLeod  
n.d. *The Archaeology of Petroglyph Cave, Cayo District, Belize*. Unpublished MS, Institute of Archaeology, Belmopan, Belize.
- Rice, Prudence  
1976 Rethinking the Ware Concept. *American Antiquity* 41(4):538-43.



Ricketson, Oliver and Edith Ricketson

- 1937 Uaxactún, Guatemala, Group E, 1926-1931. Carnegie Institution of Washington, Publication 477. Washington, DC: Carnegie Institution of Washington.

Rissolo, Dominique

- 2003 Ancient Maya Cave Use in the Yalahau Region, Northern Quintana Roo, Mexico. Association for Mexican Cave Studies, Bulletin 12. Austin: Association for Mexican Cave Studies.
- 2005 Beneath the Yalahau: Emerging Patterns of Ancient Maya Ritual Cave Use from Northern Quintana Roo, Mexico. *In* In the Maw of the Earth Monster: Mesoamerican Ritual Cave Use. James Brady and Keith Prufer, eds. Pp. 342-71. Austin: University of Texas Press.

Romero, Luís

- 2006 La Cerámica dle Valle del Motagua Medio. Programa de Arqueología del Motagua Medio Informe 13. Guatemala City: Universidad de San Carlos de Guatemala.

Roys, Ralph, Frances Scholes, and Eleanor Adams

- 1940 Report and Census of the Indians of Cozumel 1570. Carnegie Institution of Washington Publication No. 523, Contribution 30. Washington, DC: Carnegie Institution of Washington.

Sabloff, Jeremy

- 1975 Excavations at Seibal, Department of Petén, Guatemala No. 2: Ceramics. Pp. 109-261. *Memoirs of the Peabody Museum of Archaeology and Ethnography*, Vol. 13. Cambridge, MA: Harvard University Press.
- 1990 *New Archaeology and the Ancient Maya*. Scientific American Library 30. New York: W.H. Freeman.

Sabloff, Jeremy and Robert Smith

- 1968 The Importance of Both Analytic and Taxonomic Classification in the Type-Variety System. *American Antiquity* 34(3):278-85.
- 1972 Ceramic Wares in the Maya Area: A Clarification of an Aspect of the Type-Variety System and Presentation of a Formal Mode for Comparative use. *In* *Estudios de Cultura Maya*. Pp. 97-116. Mexico City: Universidad Nacional Autónoma de México.

Sabloff, Jeremy and Gordon Willey

- 1967 The Collapse of Maya Civilization in the Southern Lowlands: A Consideration of History and Process. *Southwestern Journal of Anthropology* 23(4):311-36.

- de Sahagún, Bernadino  
 1969 *Historia General de las cosas de Nueva Espana*, Volume 1. Ángel Maria Garibay, ed. Mexico: Editorial Porrúa.
- Sahlins, Marshall  
 1976 *Culture and Practical Reason*. Chicago: University of Chicago Press.
- Sallnow, Michael  
 1991 *Dual Cosmology and Ethnic Division in an Andean Pilgrimage Cult*. *In* *Pilgrimage in Latin America*. N. Ross Crumrine and Alan Morinis, eds. Pp. 281-306. New York: Greenwood Press.
- Sanders, William  
 1962 *Cultural Ecology of the Maya Lowlands*, 1. *Estudios de la Cultura Maya* 3:203-41.  
 1977 *Ethnography, Analogy, and the Teotihuacan Horizon Style*. *In* *Teotihuacan and Kaminaljuyu: A Study in Prehistoric Culture Contact*. Sanders and Michels, eds. Pp. 397-410. University Park: Pennsylvania State University Press.
- Sapper, Karl  
 1985 *The Verapaz in the Sixteenth and Seventeenth Centuries: A Contribution to the Historical Geography and Ethnography of Northeastern Guatemala*. Theodore Gutman, trans. Occasional Paper 13. Los Angeles: Institute of Archaeology, University of California.
- Satterthwaite, Linton  
 1965 *Calendrics of the Maya Lowlands*. *In* *Handbook of Middle American Indians, Volume 3: Archaeology of Southern Mesoamerica, Part 2*. Pp. 603-31. Austin: University of Texas Press.
- Satterthwaite, Linton and Elizabeth Ralph  
 1960 *New Radiocarbon Dates and the Maya Correlation Problem*. *American Antiquity* 26(2):165-84.
- Saville, Marshall  
 1916 *The Glazed Ware of Central America with Special Reference to a Whistling Jar from Honduras*. Pp. 421-6. Washington: Holmes Anniversary Volume.  
 1919 *A Sculpted Vase from Guatemala*. *Leaflets of the Museum of the American Indian, No. 1*. New York: Heye Foundation.

- Schavelzon, Daniel  
 1980 Temples, Caves, or Monsters? Notes on Zoomorphic Facades in Pre-Hispanic Architecture. In Third Palenque Round Table, 1978, Part 2. Merle Greene Robertson, ed. Pp. 151-62. Austin: University of Texas Press.
- Schellhas, Paul  
 1897 Die Göttergestalten der Mayahandschriften: Ein mythologisches Kulturbild aus dem alten Amerika. Dresden: Verlag von Richard Bertling.
- Scott, Ann  
 n.d. The Historical Context of the Founding of Maya Cave Archaeology. Unpublished MS, Department of Anthropology, University of Texas at Austin.
- Scott, Ann and James Brady  
 2005 Human Remains in Lowland Maya Caves: Problems of Interpretation. *In* Stone Houses and Earth Lords: Maya Religion in the Cave Context. Keith Prufer and James Brady, eds. Pp. 263-84. Boulder: University of Colorado Press.
- Sears, Erin and James Brady  
 1997 Modeling Pilgrimage Exchange at the Classic Maya Site of Naj Tunich. Paper presented at the Annual Meeting of the American Anthropological Association, Washington, D.C.
- SEGEPLAN (Secretaria de Planificación y Programación de la Presidencia)  
 1996 Plan Marco para el desarrollo del departamento de Alta Verapaz. Consejo departamental de desarrollo urbana y rural (CODECUR), Sociedad
- Segura, Adriana y Mirza Monterroso  
 2004 Investigaciones en La Lima. *In* Proyecto Arqueológico Cancuen Informe Preliminar no. 5. Nashville: Vanderbilt University Press.
- Seler, Eduard  
 1993a A Hieroglyphic Vase from Nebaj in Guatemala. *In* Collected Works in Mesoamerican Linguistics and Archaeology, Volume IV. J. Eric S. Thompson and Francis Richardson, eds. Pp. 351-7. Culver City, CA: Labyrinthos.  
 1993b Antiquities from the Alta Vera Paz. *In* Collected Works in Mesoamerican Linguistics and Archaeology, Volume IV. J. Eric S. Thompson and Francis Richardson, eds. Pp. 326-37. Culver City, CA: Labyrinthos.

- 1993c On the Origin of Some Forms of Quiche and Cakchiquel Myths. *In* Collected Works in Mesoamerican Linguistics and Archaeology, Volume IV. J. Eric S. Thompson and Francis Richardson, eds. Pp. 323-5. Culver City, CA: Labyrinthos.
- 2003 The Ancient Settlements of Chaculá in the Nentón District of the Department of Huehuetenango, Republic of Guatemala. John Weeks, ed. Lancaster, CA: Labyrinthos.
- Sharer, Robert
- 1978 The Prehistory of Chalchuapa, El Salvador, Volume Three: Pottery and Conclusions. Philadelphia: University of Pennsylvania Press.
- 1993 The Social Organization of the Late Classic Maya: Problems of Definition and Approaches. *In* Lowland Maya Civilization in the Eighth Century AD. Jeremy Sabloff and John Henderson, eds. Pp. 91-110. Washington, DC: Dumbarton Oaks.
- Sharer, Robert and David Sedat
- 1987a Archaeological Investigations in the Northern Maya Highlands, Guatemala: Interaction and the Development of Maya Civilization. University Museum Monograph 59. Philadelphia: University of Pennsylvania Press.
- 1987b Preclassic Ceramics from the Salama Valley, Baja Verapaz, Guatemala. *In* Maya Ceramics: Papers from the 1985 Maya Ceramic Conference, Part II. Prudence Rice and Robert Sharer, eds. Pp. 241-76. Oxford: BAR.
- Shepard, Anna
- 1955 Technological Analysis. *In* Ceramic Sequence at Uaxactun, Guatemala, Volume 1. Pp. 32-6. Publication No. 20. New Orleans: Middle American Research Institute.
- Shook, Edwin and Marian Hatch
- 1978 Ruins of El Balsamos, Guatemala. *Journal of New World Archaeology* 3(1):1-38.
- Shook, Edwin and Alfred Kidder
- 1952 Mound E-III-e, Kaminlajuyu, Guatemala. Carnegie Institution of Washington publication No. 596. Washington, D.C.: Carnegie Institution of Washington.
- Siemens, Alfred and Dennis Puleston
- 1972 Ridged Fields and Associated Features in Southern Campeche: New Perspectives on the Lowland Maya. *American Antiquity* 37:228-39.
- Silverman, Helaine
- 1994 The Archaeological Identification of an Ancient Peruvian pilgrimage Center. *World Archaeology* 26(1):1-18.

Smith, A. Ledyard

- 1955 Archaeological Reconnaissance in Central Guatemala. Carnegie Institution of Washington Publication No. 608. Washington, DC: Carnegie Institution of Washington.
- 1965 Architecture of the Guatemalan Highlands. *In Handbook of Middle American Indians, Volume 2: Archaeology of Southern Mesoamerica, Part 1.* Pp. 76-94. Austin: University of Texas Press.

Smith, A. Ledyard and Alfred Kidder

- 1943 Explorations in the Motagua Valley, Guatemala. Pp. 101-83. Publication 546. Washington, DC: Carnegie Institution of Washington.
- 1951 Excavations at Nebaj, Guatemala. Carnegie Institution of Washington Publication 594. Washington, D.C.: Carnegie Institution of Washington.

Smith, A. Ledyard and Gordon Willey

- 1969 Seibal, Guatemala in 1968: A Brief Summary of Archaeological Results. *Proceedings of the International Congress of Americanists* 1:151-7.

Smith, Michael E.

- 1979 A Further Criticism of the Type-Variety System: The Data can't be Used. *American Antiquity* 44(4):822-6.

Smith, Robert E.

- 1952 Pottery from Chipoc, Alta Verapaz, Guatemala. *In Contributions to American Anthropology and History* XI, no. 56. Pp. 215-66. Washington D.C.: Carnegie Institution of Washington.
- 1955 Ceramic Sequence at Uaxactun, Guatemala, vol. I and II. Middle American Research Institute Publication No. 20. New Orleans: Tulane University.
- 1971 The Pottery of Mayapan, Including Studies of Ceramic Material from Uxmal, Kabah, and Chichen Itza. *Papers of the Peabody Museum of Archaeology and Ethnology, Vol. 66.* Cambridge, MA: Harvard University Press.

Smith, Robert E. and James Gifford

- 1966 Maya Ceramic Varieties, Types, and Wares at Uaxactun: Supplement to "Ceramic Sequence at Uaxactun, Guatemala." *In Middle American Research Institute Publication No. 28.* Pp. 125-74. New Orleans: Tulane University.

Smith, Robert E.; Gordon Willey; and James Gifford

- 1960 The Type-Variety Concept as a Basis for the Analysis of Maya Pottery. *American Antiquity* 25(3):330-40.

Solomon, Anne

- 2001 What is an Explanation? Belief and Cosmology in Interpretations of Southern San Rock Art, Artin, Southern Africa. *In* The Concept of Shamanism: Uses and Abuses. Henri-Paul Francfort and Roberte Hamayon, eds. Pp. 161-78. Budapest: Akadémiai Kiadó.

Spenard, John

- 2006 The Gift in the Cave for the Gift of the World: An Economic Approach to Ancient Maya Cave Ritual in the San Francisco Hill-Caves, Cancuen Region, Guatemala. MA thesis, Department of Anthropology, Florida State University, Tallahassee.

Spence, Michael

- 1996 A Comparative Analysis of Ethnic Enclaves. *In* Arqueología mesoamericana: Homenaje a William T. Sanders. Mastache, Parsons, Santley, and Serra Puche, eds. Pp. 333-53. Mexico City: Instituto Nacional de Antropología e Historia.

Stephens, John

- 1993 Incidents of Travel in Central America, Chiapas, and Yucatán. Washington, D.C.: Smithsonian Institution Press.

Stocks, Anthony

- 2002 The Struggle for Q'eqchi Community Conservation and Management of Mayan Sacred (Cave) Sites: The Case of Caves of Candelaria and Bombil Pek in Alta Verapaz, Guatemala. Paper presented at the conference "Protecting Cultural and Natural Heritage in the Western Hemisphere: Lessons from the Past; Looking to the Future." Harvard University Graduate School of Design, December 5-7, 2002.

Stone, Andrea

- 1995 Images from the Underworld: Naj Tunich and the Tradition of Maya Cave Painting. Austin: University of Texas Press.

Stross, Brian

- 1994 Maya Creation: A Shamanic Perspective. *U Mut Maya* 5:159-271.

Stuart, David

- 1984 Royal Auto-Sacrifice among the Maya: A Study of Image and Meaning. *In* Res 7/8:6-20.
- 1993 Historical Inscriptions and the Maya Collapse. *In* Lowland Maya Civilization in the Eighth Century A.D. Jeremy Sabloff and John Henderson, eds. Pp. 321-54. Washington, DC: Dumbarton Oaks.
- 1996 Kings of Stone: A Consideration of Ancient Stelae in Maya Ritual and Representation. *Res* 29/30:148-71.

- 1997 *The Hills are Alive: Sacred Mountain in the Maya Cosmos. Symbols*, Spring 1997.
- 1999 *Cave References in Maya Inscriptions*. Unpublished MS, Department of Anthropology, Harvard University.
- Stuart, David and Stephen Houston
- 1994 *Classic Maya Place Names. Studies in Pr-Columbian Art and Archaeology 33*. Washington, D.C.: Dumbarton Oaks Research Library and Collection.
- Suhler, Charles; David Freidel; and Traci Ardren
- 1998 *Northern Maya architecture, ritual, and cosmology. In Anatomía de una Civilización: Aproximaciones Interdisciplinarias a la Cultura Maya*. Pp. 253-73. Madrid: Sociedad Española de Estudios Mayas.
- Tambiah, Stanley
- 1977 *The Galactic Polity: The Structure of Traditional Kingdoms in Southeast Asia*. *Annals of the New York Academy of Sciences* 293:69-97.
- Taube, Karl
- 2003 *Maws of Heaven and Hell: The Symbolism of the Centipede and Serpent in Classic Maya Religion. In Antropología de la eternidad: La muerte en la cultura maya*. Andrés Ciudad Ruiz, Mario Humberto Ruz Sosa and Maestra Josefa iglesias Ponce de León, eds. Madrid: Sociedad Española de Estudios Mayas.
- Tedlock, Barbara
- 1992 *Time and the Highland Maya, Revised Edition*. Albuquerque: University of New Mexico Press.
- Tedlock, Dennis
- 1996 *Popol Vuh: The Definitive Edition of the Mayan Book of the Dawn of Life and the Glory of Gods and Kings*. New York: Touchstone.
- Thompson, Edward H.
- 1897 *Cave of Loltun, Yucatan: Report of Explorations by the Museum, 1888-89 and 1890-91*. *Memoirs of the Peabody Museum of American Archaeology and Ethnology* volume 1, number 2. Pp. 51-72. Cambridge: Harvard University Press.
- 1938 *The High Priest's Grave, Chichen Itza, Yucatan, Mexico*. *Field Museum of Natural History, Anthropology Series 27, No. 1*, prepared for publication, with notes and introduction by J. Eric Thompson. Chicago: Field Museum of Natural History.

Thompson, J. Eric S.

- 1952 La inscripción jeroglífica del tablero e el Palacio. *Anales del Instituto Nacional de Antropología e Historia* 4:61-8.
- 1959 The Role of Caves in Maya Culture. In *Mitteilungen aus dem Museum für Völkerkunde in Hamburg*, No. 25. Pp. 122-9. Hamburg: Museum für Völkerkunde.
- 1964 Trade Relations between the Maya Highlands and Lowlands. *Estudios de Cultura Maya* 4:13-48.
- 1970 Maya History and Religion. *Civilizations of the American Indian Series*, 99. Norman: University of Oklahoma Press.
- 1975 Introduction to the Reprint Edition. In *The Hill-Caves of Yucatan: A Search for Evidence of Man's Antiquity in the Caverns of Central America*. Henry Mercer. Pp. vii-xliv. Norman: University of Oklahoma Press.

Tomasic, John and Claudia Quintanilla

- 2004 Excavaciones en el sitio arqueológico Tres Islas. In *Proyecto Arqueológico Cancuen, informe preliminar No. 5, temporada 2003*. Arthur Demarest, Tomás Barriéntos, Brigitte Kovacevich, Michael Callaghan, Brent Woodfill, and Luis F. Luin, eds. Nashville: Vanderbilt University Press.

Tomasic, John; Claudia Quintanilla; and Edy Barrios

- 2005 Excavaciones en el sitio arqueológico Tres Islas, Río Pasión, Petén. In *XVIII Simposio de Investigaciones Arqueológicas en Guatemala*. Juan Pedro Laporte *et al.*, eds. Guatemala: Ministerio de Cultura y Deportes.

Tourtellot, Gair; Jeremy Sabloff; and Robert Sharick

- 1978 A Reconnaissance of Cancuen. In *Excavations at Seibal, Department of Petén, Guatemala*, edited by Gordon Willey. Pp. 191-240. *Memoirs* 14(2). Cambridge: Peabody Museum of Anthropology and Ethnology.

Townsend, Joan

- 1997 Shamanism. In *Anthropology of Religion: A Handbook*. Stephen Glazier, ed. Westport, CT: Greenwood.

Townsend, Richard

- 1992 Introduction: Landscape and Symbol. In *The Ancient Americas: Art from Sacred Landscapes*. Richard F. Townsend, ed. Pp. 29-47. Chicago: Art Institute of Chicago.

Tozzer, Alfred

- 1957 Chichen Itza and its Cenote of Sacrifice: A Comparative Study of Contemporaneous Maya and Toltec. *Memoirs* 11 and 12. Cambridge, MA: Peabody Museum of Archaeology and Ethnography.



- Turner, Victor  
 1969 *The Ritual Process: Structure and Antistructure*. Chicago: Aldine Publishing Co.  
 1974 *Dramas, Fields, and Metaphors: Symbolic Action in Human Society*. Ithaca: Cornell University Press.
- Tylor, Edward  
 1953 Animism. *In Primitive Heritage*. Margaret Mead, ed. Pp. 46-52. New York: Random House.
- Vaillant, George  
 1927 *The Chronological Significance of Maya Ceramics*. Ph.D. Dissertation, Department of Anthropology, Harvard University, Cambridge, MA.
- Valdéz, Fred  
 1987 *Prehistoric Ceramics of Colha, Northern Belize*. PhD dissertation, Department of Anthropology, Harvard University.
- Varela Torrecilla, Carmen and Juan Luís Bonor Villarejo  
 2003 Cronología y función de las cavernas en el área maya: ¿Espacio ritual o profano? *In Espacios mayas: Representaciones, usos, creencias*. Alain Breton, Aurora Munod Becquelin, and Mario Humberto Ruz, eds. Pp. 111-141. Mexico City: Centre D'Études Mexicaines et Centraméricaines.
- Viel, Gabrielle  
 1997 *The Deer-Trapping Almanacs in the Madrid Codex*. *In Papers on the Madrid Codex*. Victoria Bricker and Gabrielle Vail, eds. Pp. 73-110. Publication 64. New Orleans: Middle American Research Institute.
- Viel, René  
 1983 Evolución de la cerámica en Copan: Resultados preliminares. *In* Introducción a la arqueología de Copan, Honduras, Tomo 1. Pp. 471-549. Tegucigalpa: Secretaría de Estado en el Despacho de Cultura y Turismo.  
 1984 La cerámica de la Str. A-6 de La Lagunita. *In* La Període Formative á La Lagunita et danse le Quiché, meridional Guatemala. Alain Ichon and René Viel. Paris: Institut d'Ethnologie.
- Vinson, GL  
 1960 Las ruinas Mayas de Petexbatun. *Antropología e Historia* 12(2):3-9. Guatemala: Instituto de Antropología e Historia.
- Vogt, Evon  
 1964a Ancient Maya and contemporary Tzotzil Cosmology: A Comment on Some Methodological Problems. *American Antiquity* 30(2):191-5.

- 1964b Some Implications of Zinacantan Social Structure for the Study of the Ancient Maya. *Proceedings of the International Congress of Americanists* 35(I):307-19.
- 1976 *Tortillas for the Gods: A Symbolic Analysis of Zinacantan Ritual*. Cambridge: Harvard University Press.
- 1981 Some Aspects of the Sacred Geography of Highland Chiapas. *In Mesoamerica Sites and World Views*. Elizabeth Benson, ed. Pp. 119-42. Washington: Dumbarton Oaks Research Library and Collections.
- Vogt, Evon and David Stuart
- 2005 Some Notes on Ritual Caves among the Ancient and Modern Maya. *In In the Maw of the Earth Monster: Mesoamerican Ritual Cave Use*. James Brady and Keith Prufer, eds. Pp. 155-85. Austin: University of Texas Press.
- Walters, Gary
- 1988 *Maya Ceremonial Caves Project, 1988, Belize, Central America*. Columbia, MI: Triad Research Services.
- Watson, Patty Jo, Steven LeBlanc, Charles Redman
- 1971 *Explanation in Archaeology: An Explicitly Scientific Approach*. New York: Columbia University Press.
- Wauchope, Robert
- 1948 *Excavations at Zacualpa, Guatemala*. Publication 14. New Orleans: Middle American Research Institute.
- 1975 *Zacualpa, El Quiche, Guatemala: An Ancient Provincial Center of the Highland Maya*. Middle American Research Institute, Publication 39. New Orleans: Tulane University Press.
- Wetherington, Ronald (ed.)
- 1978 *The Ceramics of Kaminajuyu, Guatemala*. State College, PN: Pennsylvania State University Press.
- Wheat, J. James Gifford, and W. Wasley
- 1958 Ceramic Variety, Type Cluster, and Ceramic System in Southwestern Pottery Analysis. *American Antiquity* 24(1):34-47.
- Wilk, Richard
- 1991 *Household Ecology: Economic Change and Domestic Life among the Kekchi Maya in Belize*, Tuscon: University of Arizona Press.
- Willey, Gordon
- 1970 The Real Xe Ceramics of Seibal, Petén, Guatemala. *In Monographs and Papers in Maya Archaeology*, vol. 61. W.R. Bullard, Jr., ed. Pp. 313-56. Cambridge: Papers of the Peabody Museum, Harvard University.

- 1990 General Summary and Conclusions. In Excavations at Seibal, Department of Peten, Guatemala, edited by Gordon Willey. *Memoirs* 17:4. Cambridge: Peabody Museum of Archaeology and Ethnology.
- Willey, Gordon; Richard Leventhal; Arthur Demarest; and William Fash  
 1994 Ceramics and Artifacts from Excavations in the Copan Residential Zone. *Papers of the Peabody Museum of Archaeology and Ethnology*, Volume 80. Cambridge: Harvard University Press.
- Willey, Gordon and A. Ledyard Smith  
 1969 The Ruins of Altar de Sacrificios, Department of Peten, Guatemala: An Introduction. *Papers of the Peabody Museum of Ethnography* Vol. 62, No. 1. Cambridge: Harvard University Press.
- Willey, Gordon, A. Ledyard Smith, Gair Tourtellot, and Ian Graham  
 1975 Excavations At Seibal, Department of Peten, Guatemala: Introduction: The Site and Its Setting. *Peabody Museum of Archaeology and Ethnology*, *Memoirs* Volume 13 (1). Harvard University, Cambridge.
- Wilson, Richard  
 1993 Anchored Communities: Identity and History of the Maya-Q'eqchi'. *Man* 28(1):121-38.  
 1995 *Maya Resurgence in Guatemala: Q'eqchi' Experiences*. Norman: University of Oklahoma Press.
- Woodfill, Brent  
 1999 Caves and the Rise of the Late Pre-Classic Maya Elite. BA Honors thesis, Department of Anthropology, Macalester College, St. Paul, MN.  
 2002 The *Witz* as Temple: Natural vs. Constructed Sacred Landscapes among the Maya of the Upper Pasión Region, Guatemala. Paper presented at the Annual Meetings of the American Anthropological Association, New Orleans, LA.  
 2004 Manual arqueológico para guías turísticas en las Cuevas de Candelaria. Guatemala City: Chemonics, Inc.  
 2005 Archaeological Investigations in the Candelaria Caves and La Lima, Alta Verapaz, Guatemala. Electronic document, <http://www.famsi.org/reports/02083/index.html>, accessed October 31, 2005.  
 2006 New Evidence of Long-Distance Exchange in Alta Verapaz, Guatemala. Paper presented at the Annual Meeting of the Society for American Archaeology, San Juan, Puerto Rico.

- Woodfill, Brent; Federico Fahsen; and Mirza Monterroso  
 2006 Nuevas Evidencias de Intercambio de Larga Distancia en Alta Verapaz, Guatemala. *In* XIX Simposio de Investigaciones Arqueológicas de Guatemala. Guatemala: Ministerio de Cultura y Deportes.
- Woodfill, Brent; Nicolas Miller; Margaret Tarpley; and Amalia Kenward  
 2003 Investigaciones Espeleo-arqueológicas en Chisec, Alta Verapaz y La Caoba, Sayaxché, Petén. *In* XVI Simposio de Investigaciones Arqueológicas en Guatemala. Guatemala: Ministerio de Cultura y Deportes.
- Woodfill, Brent and Mirza Monterroso  
 2005 Investigaciones espeleo-arqueológicas en las Cuevas de Candelaria, Temporada 2004. *In* Proyecto Arqueológico Cancuen Informe Preliminar No. 6. Nashville: Vanderbilt University Press.  
 2007a Investigaciones en la Cueva de Hun Nal Ye. *In* Proyecto Arqueológico Cancuen informe preliminar, temporadas 2004-6. Nashville: Vanderbilt University Press.  
 2007b Investigaciones en las Cuevas de Candelaria, temporada 2004. *In* Proyecto Arqueológico Cancuen informe preliminar, temporadas 2004-6. Nashville: Vanderbilt University Press.
- Woodfill, Brent; Álvaro Ramírez; Emilia Gazzuolo; Mirza Monterroso; Adriana Segura; Carlos Girón; Jose Hurtado; Nicolas Miller; and Paul Halacy  
 2004 Informe preliminar de trabajos espeleo-arqueológicos en las Cuevas de Candelaria, 2003. *In* Proyecto Arqueológico Cancuen Informe Preliminar No. 5. Nashville: Vanderbilt University Press.
- Woodfill, Brent and Jon Spenard  
 2001 Investigaciones Arqueológicas y Espeleo-arqueológicas en la vecindad de La Caoba, Sayaxche, Guatemala. *In* Proyecto Arqueológico Cancuén Informe Preliminar #3, Nashville: Vanderbilt University Press.
- Wright, J.  
 1967 Type and Attribute Analysis: Their Application to Iroquois Cultura History. *In* Iroquois Culture, History, and Prehistory: Proceedings of the 1965 Conference on Iroquois Research. E. Tooker, ed. Pp. 99-100. Albany: New York State Museum and Science Service.

## APPENDIX A:

### OTHER ARTIFACTS

#### I. Introduction

The objects described in this appendix are all of the non-ceramic artifacts and the modified sherds found at Hun Nal Ye, the Candelaria Caves, La Lima, the San Francisco Hills, La Caoba Vieja, and the stela area of Tres Islas.

In this work, over 250 pages are devoted to ceramic analysis, while the other material remains are given only about 70. This is a bias present in almost all of Maya archaeology, where ceramics are given much more attention than other materials (most monograph series even have two different volumes—“ceramics” and “artifacts,” which includes all of the modified sherds and non-ceramic artifacts).

Most lithicists (e.g., Kovacevich 2006, Moholy-Nagy 2003) trace the beginning of formal analysis of the non-ceramic artifacts to Kidder’s report on the Uaxactun material in 1947. While it is true that the description was much more *ad hoc* before the work was published, the first work that truly resembles the present-day analyses is Willey’s at Altar de Sacrificios (1972) and Seibal (1978), which gave exact numbers and percentages and formally discussed the variations in the sample.

Unlike the ceramics, all of the lithic artifacts were analyzed (figure A-1)—a total of 5399 pieces of chert (63% of the sample), 2211 pieces of obsidian (26% of the sample), 178 pieces of groundstone (2% of the sample), 43 pieces of jade (less than 1%

of the sample), 11 pieces of pyrite (less than 1% of the sample), 726 pieces of quartz (8% of the sample), and 45 pieces of other materials (less than 1% of the sample). In addition, many faunal and human remains and 20.4 kg of burnt clay were recovered, as well as a number of figurines (which will be reported in the dissertation of Erin Sears). Description of the artifacts is organized into several different sections below, following a description of the different materials used.

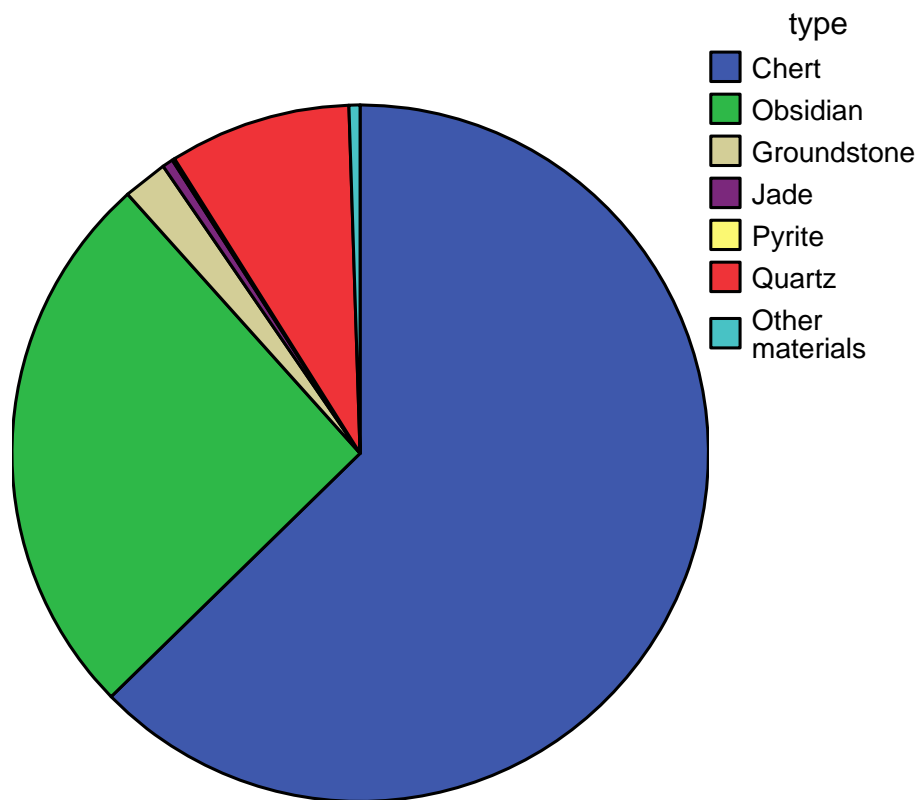


Figure A- 1: Types of Artifacts by Count

## II. Lithic Material

A multitude of lithic materials were uncovered which were worked and used in a variety of ways. The following discussion of the lithic raw materials follows the same

categories as the analysis itself. All of the categories are commonly used although they are not systematic—some represent material classes, others use classes and still others a specific intersection of use and material.

### Chert

Chert is, fundamentally, quartz with very small crystalline structures (microcrystalline or cryptocrystalline). Chalcedony is normally classified with chert, and it does appear in many of the same contexts. It is normally more transparent than chert and is composed of fibrous quartz (Klein and Hurlbut 1977:528). Archaeologists, however, use the term chalcedony in a more general way for any chert that is transparent (Kovacevich 2006:342).

Chert was very rare in the highlands, where it normally had to be imported, although there is chert of very poor quality present in the Río Copan (Valdez and Potter 1991:204), and the artifacts that were used were recycled at a higher rate than in the lowlands.

### Obsidian

Like quartz and chert, obsidian and pumice are made from the same material—rhyolite—which is a mix of feldspar and quartz (Klein and Hurlbut 1977:567). The difference is in how it was formed. Obsidian was rapidly cooled, resulting in a glassy structure, while pumice exhibits the same basic structure but is mostly composed of cavities which resulted from gas bubbles. Obsidian is only found in areas of heavy volcanism, while pumice is likely found in naturally deposited lenses throughout the

Maya world (including the lowlands), as a volcanic eruption can disperse the material far from the actual source (Braswell, pers. comm. 2006).

### Groundstone

There are few hard stones readily available to the lowland Maya—the entire area from the extreme northern highlands to the tip of the Yucatan Peninsula is karstic, and the limestone that forms the bedrock is useless for most things beyond building material and plaster. The stone is formed underwater, normally in a tropical saline environment. Calcite from marine animals is precipitated out of the water (Ford and Williams 1989:15) and accumulates with organic matter. The organic matter decomposes as the calcite is slowly petrified (Ibid. 17). Sandstone is another common lowland material, and most often consists of sand that is cemented by calcite, silica, iron oxide, and/or clay (Klein and Hurlbut 1977:580).

Granite and basalt are both common igneous rocks. The former is a volcanic material made from feldspar and quartz (Klein and Hurlbut 1977:364) and is crystallized at low temperatures (Ibid.:566). Basalt is the most common volcanic rock and is primarily made from feldspar (Ibid.:568) and is cooled lava. All of the examples from the region appear to be vesicular basalt, which contains cavities formed by gas bubbles and was likely formed near the top of the lava flows.

### Jade

True jadeite is a very dense silicate (like quartz and chert) that is formed in only a few places on the planet, as it needs very high pressures and relatively low temperatures



to form (Harlow 1993:13, Klein and Hurlbut 1977:483). In Guatemala, it is found along the major fault line in the Middle Motagua Valley. There is one related but unidentified stone that I have classified as “greenstone.” It is, true to its name, a hard green stone with darker speckles used to make the groundstone hand-axes described below, although one mano was made from the same material and one hand axe was made from granite. All of the examples were polished to a high sheen.

### Mirrors

Pyrite, hematite, and mica are three other minerals, all of which are volcanic in origin. The first two are iron ores—the former is commonly called “fool’s gold” and is a gold-colored crystalline metal found in igneous and sedimentary contexts (Klein and Hurlbut 1977:366), while the latter is reddish or darker and is used today in pigments or cut for use as gems (Ibid.:380). Mica (which is most likely either muscovite or biotite) is normally associated with granitic rock outcrops (Ibid.:516, 518). It is composed of multiple, thin, translucent sheets that are flexible and elastic. Slate is a metamorphic stone that is also composed of layered sheets. It is most often formed by exposing shale to high temperatures and/or pressures (Klein and Hurlbut 1977:588).

### Quartz

Quartz is identical chemically to chert (and is, in fact, often the substance from which chert is made). It forms in volcanic contexts (Klein and Hurlbut 1977:526) and the more slowly it cools the larger the crystal size. While limestone was forming, however,

quartz or remnants of siliceous sea-life was often dissolved and re-deposited in nodules or sheets (Ford and Williams 1989:23).

### *Sources of the Lithic Materials*

Limestone, sandstone, chert, chalcedony, and chert are all available throughout the lowlands and artifacts made from these materials were presumed to be of local origin. Pumice, while common in the highlands, is potentially present in the region as well (Braswell, pers. comm. 2006), and I have seen well-worn and rounded quartz nodules that were obviously transported naturally into the region from the highlands, so at least some of the quartz was likely locally gathered as well.

All of the other minerals were imported into the region. The most common imported materials are all from the Guatemalan highlands—obsidian, pyrite, jade, hematite, slate, and basalt. The rare occurrences of granite and mica were likely imported from the Maya Mountains in southern Belize, which is the only major granitic area near the region. Kovacevich (2006:231) suggests that pyrite might have been obtained in local caves, but neither I nor any of the other members of the cave project have seen any.

For a specific description of the sources of the obsidian present in the region, see the section on obsidian artifacts below.

### **III. Chipped Stone (Chert)**

Chert artifacts were recovered from all sites in the region north of the Cave of Hun Nal Ye. A basic analysis was performed on the entire sample by Woodfill and

Monterroso, categorizing by artifact type, color, texture, presence/absence of use, percentage of cortex present, and artifact part. All of the artifact types except for prismatic cores and drills were reported from Cancuen (Kovacevich 2006).

There is a general preference for fine-textured chert at all of the sites, which composed 66% of the total sample (medium texture is 22%, rough is 10%, and chalcedony makes up 2%), and there is no statistical correlation between texture and artifact type. The color distribution is fairly standard throughout the region—grays make up the lion’s share of the sample with the exception of the Candelaria Caves sample, where tan chert is slightly more common. Brown, white, yellow, pink, and black are the next-most-common colors; red, orange, and green are rare.

Thirteen chert artifact types were identified, which are listed according to frequency and described briefly below. In addition, three pieces of unworked chert were recovered. While it would be beneficial to discuss changing patterns of use over time, the disparate nature of the sample (the settlements are predominately Late Classic and the shrines are normally earlier and often mixed) does not allow for a reliable or significant comparison.

Measurements (width, length, and thickness) are given for all of the artifact types with the exception of debitage, for which a general summary would be meaningless. All reported measurements are taken from complete pieces.

#### Debitage

**Frequency:** 4762 pieces (88% of the total sample)

**Weight:** 43,360.5 g

**Description:** For the purposes of this investigation, all debitage—primary flakes, secondary flakes, and shatter—were combined into a single category. Only 38% of the sample had some sort of cortex present on the surface, of which 3% had at least one side with 75-100% cortex cover, possibly indicating that the nodules were somewhat processed before reaching the site. 2% of the sample (101 pieces) had evidence of some use but were not retouched (retouched flakes are treated separately below).

Since this category covers all debitage, there is a wide variation in length, width, and thickness, so they are not described in any detail here.

**Intraregional Comparison:** Debitage makes up the majority of the chert sample at each of the places where it is found. The percentage of flakes without cortex is normally between 49% (Tres Islas) and 62% (La Lima), although in the Candelaria Caves it is 86%. Combined with the relative absence of cortex on the nuclei present, it is likely that the nodules were preprocessed before bringing them into the caves. More cortex was present at Tres Islas than at the other sites.

**Interregional Comparison:** While one can assume that debitage was ubiquitous at all lowland sites, where chert was plentiful and used to make the majority of tools, it is not always reported. In the highlands, however, chert is rare outside of Copan, as it does not occur naturally and the few chert objects that made their way uphill were almost certainly imported as finished products.

At Tikal (Moholy-Nagy 2003:8), debitage made up 89% of the sample, nearly identical to the present assemblage. In the Copan residential zone (Willey et al. 1994:269), debitage made up 96% of the sample. In the Naj Tunich sample, 124 pieces of debitage were recovered (Brady 1989:319-22).

## Nucleus

**Frequency:** 189 pieces (4% of the total sample)

**Weight:** 20,777.3 g

**Description:** The nuclei appear to have been primarily whole nodules, normally with some cortex present (84% of the sample). Just over half of the sample (51%) has at least one side with between 25 and 75% cortex cover.

The measurements of the sample are widely variable, with an average width of 46 mm (8-88 mm), an average length of 62 mm (11-113 mm), and an average thickness of 32 mm (10-55 mm). 6 nuclei (3%) have some evidence of reuse (normally as peckers but occasionally as scrapers), although they do not appear to have been retouched.

**Intraregional Comparison:** Nuclei are present at every site north of Hun Nal Ye.

Although the sample is small at Candelaria (only three examples), none of the nuclei have cortex remaining, suggesting that they were more pre-processed than at the other sites (which is further supported by the lack of cortex on the debitage). At the settlements, for example, the cores most commonly have 50-75% surface cover on at least one side.

**Interregional Comparison:** As with debitage, one can only presume that nuclei are ubiquitous in the lowlands but are not always reported. At Tikal, nuclei made up 4% of the total sample (Moholy-Nagy 2003:8), as they did in the present assemblage.

## Prismatic Blade

**Frequency:** 119 pieces (2% of the total sample)

**Weight:** 1,348.4 g

**Description:** These artifacts were made using the same process as the obsidian prismatic blades. Since they were pushed off in consecutive layers, there is normally little cortex present. 77% of the sample is cortex free, while less than 2% has one side with 75-100% cortex cover.

The average width is 19 mm (7-41 mm), the average length is 54 mm (12-95), and the average thickness is 8 mm (2-23 mm). Only 34% of the sample has visible evidence of use.

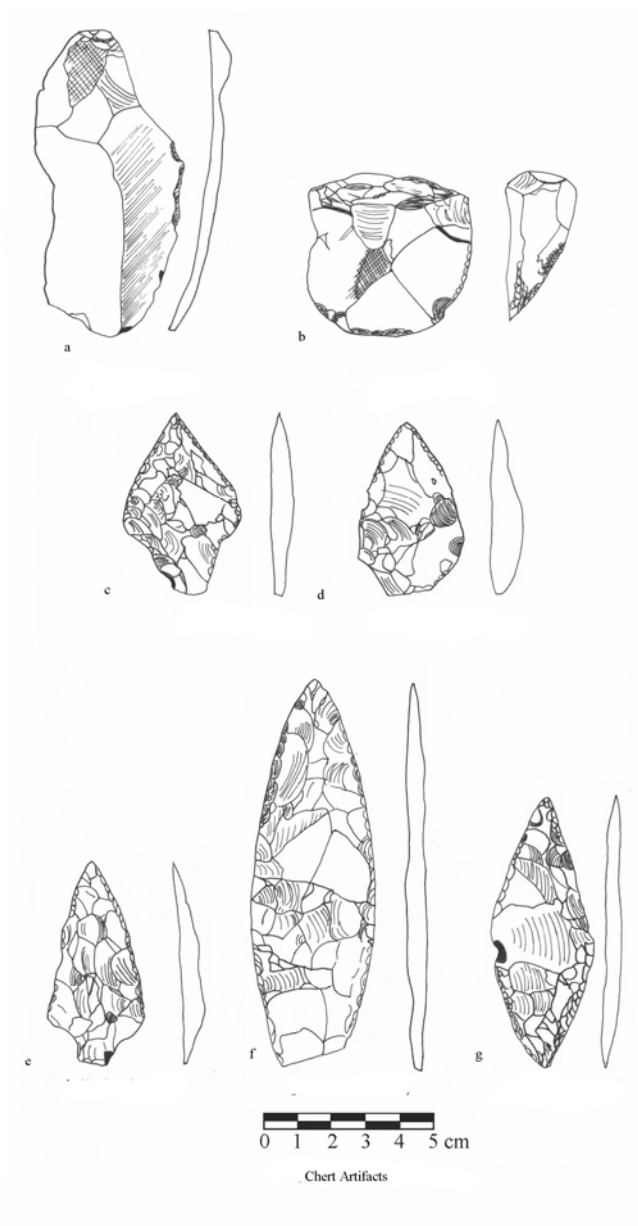
**Intraregional Comparison:** This type is rare but present at all of the sites, but comprises the largest proportion of the sample in the Candelaria Caves (17%) and Tres Islas (7%); at the other sites blades make up about 1% of the total collection. All 46 prismatic blades from Tres Islas come from the same cache, however; 42 are without use-wear, and the other 4 might have been damaged in recovery or transit.

While they were less frequent in La Lima and La Caoba Vieja, they show more evidence of wear than at the ritual centers (69% with no visible use at the caves compared to 35% at the settlements).

The distribution of this artifact type might suggest that the prismatic blades were more heavily produced in the Early Classic (the period of primary use for Candelaria and the date of the Tres Islas cache), but without more evidence it is difficult to say for sure.

**Interregional Comparison:** Similar tools have been found in several parts of the Maya world but classified in different ways. Roemer (1991:57-8) found similar “unmodified blades” at Colha that were more irregular in form than the present sample and without evidence of use, and posited that they were debitage or rejected blanks. At Tikal, similar

blades made up less than 1% of the sample (687 examples), and were occasionally found in caches, problematic deposits, and an Early Classic burial (Moholy-Nagy 2003:22). 2 chert prismatic blades were reported at San Pablo Cave (Lee and Hayden 1988:60) and one was recovered from Naj Tunich (Brady 1989:316). Several blades were recovered at El Mirador (Fowler 1987:12), although they were normally retouched.



**Figure A- 2: Chert Artifacts, a) scraper, b) chopper, c-g) bifacial points**

Bifacial Point (figure A-2 c-g, A-4 c, A-7)

**Frequency:** 74 pieces (1% of the total sample)

**Weight:** 1,121.4 g

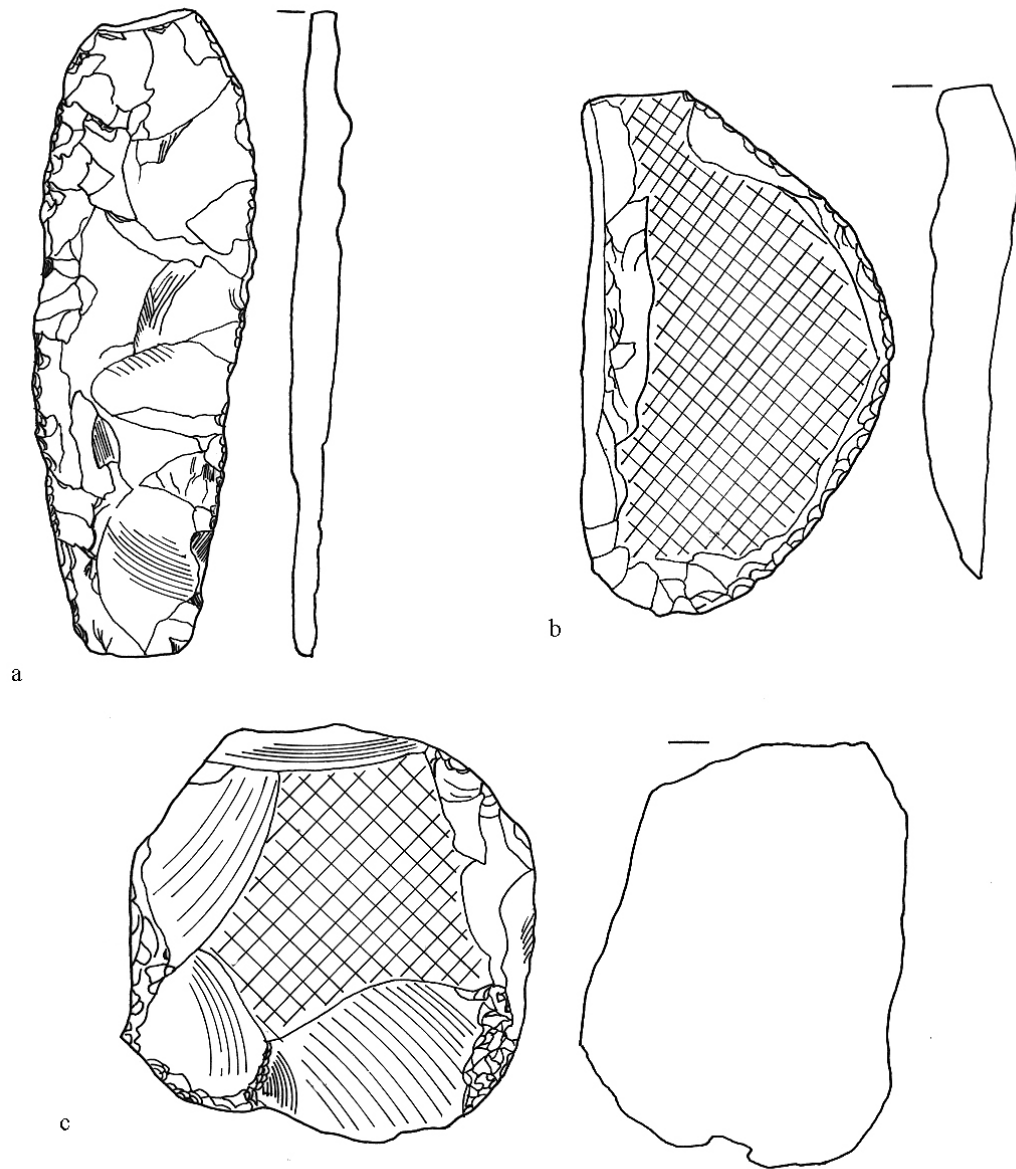
**Description:** There is a fair amount of variety in this category in both size and execution, although they are generally free of cortex (92%). The average width is 33 mm (8-51), the average length is 62 mm (17-113 mm), and the average thickness is 10 mm (3-21 mm). The majority of the sample (91%) has some visible evidence of use.

**Intraregional Comparison:** Points were found at all of the sites north of Hun Nal Ye and are widely variable at each of the sites. Bifaces were the most common finished artifact type reported at Cancuen (Kovacevich 2006:358).

**Interregional Comparison:** Points were found at every site in the Maya lowlands, although they are referred to with different terminology by different scholars. Compared to debitage and scrapers, they are always rare, composing 1% or less of the sample at any given site.

While chert does not occur naturally in the majority of the highlands, occasional chert objects are reported. Two points were recovered in Alta Verapaz (Arnauld 1986:290) and 2 more were identified in the Nebaj area (Kidder 1951:51, Becquelin et al. 2003:194). Ichon recorded chert points throughout the Middle Chixoy Valley—2 dating to the Late Classic or Postclassic at Los Encuentros (Ichon 1982:176) and others from the site of Chitomax 1 with bifacial retouching (Ichon and Cheesman 1983:127). At Copan (Willey et al. 1994:265), 22 points were identified, composing 2% of the sample. Smith and Kidder (1943) reported an Early Classic cache with a single chert knife or point at Guaytan in the Motagua Valley.





0 1 2 3 4 5 cm

Chert Artifacts

Figure A- 3: Chert Artifacts, a) general biface, b) scraper, c) chopper

### Pecker

**Frequency:** 66 pieces (1% of the total sample)

**Weight:** 11,409.9 g

**Description:** Peckers (or hammer stones) are large, rough tools without much effort going into production. As a result, 94% of the sample still has some cortex left over, which is normally in the 25-75% range (73%).

The average width is 53 mm (18-110 mm), the average length is 64 mm (30-134 mm), and the average thickness is 41 mm (7-90 mm).

**Intraregional Comparison:** Peckers are rare but present everywhere except Hun Nal Ye and the Candelaria Cave system. They tend to have a smaller width and thickness in Tres Islas than at the other sites (37 and 27 mm, respectively, vs. between 52-68 and 41-43 mm), with the longest examples barely within the shorter range for the other types. At Cancuen, Kovacevich (2006:367) recorded the same artifacts, although she classified them as “nodule tools.”

**Interregional Comparison:** 8 chert pebble choppers or pounders were identified at Copan by Willey et al. (1994:264).

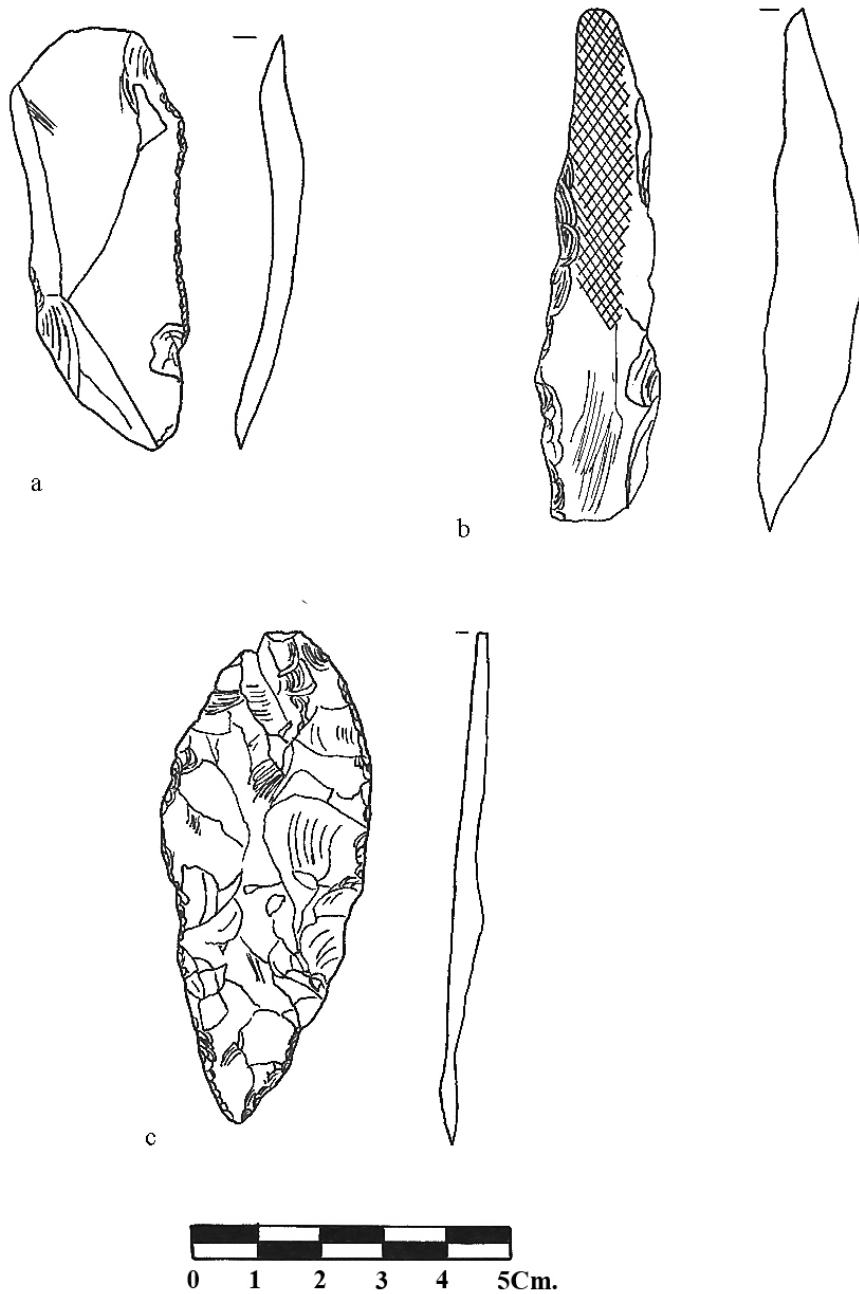
### Scraper (figure A-2 a, A-3 b, A-4 a-b)

**Frequency:** 57 pieces (1% of the total sample)

**Weight:** 1,761.4 g

**Description:** While it was not necessary for the tool to be well-finished beyond a single sharp edge, most of the examples were cortex-free (63%). The average width is 35 mm

(14-83 mm), the average length is 58 mm (30-134 mm), and the average thickness is 13 mm (6-30 mm). All have evidence of use.



### Chert Artifacts

Figure A- 4: Chert Artifacts, a-b) scraper, c) bifacial point

***Intraregional Comparison:*** Scrapers are rare but present at each of the sites. As with debitage and nuclei, it is more common for the Candelaria samples to be cortex free (25% vs. 43-67% at other sites).

***Interregional Comparison:*** Scrapers are simply retouched flakes that are certainly found at every site in the Maya lowlands but are not always reported. They made up 1% of the sample at Tikal and were occasionally found in problematical deposits (Moholy-Nagy 2003:20-1). At Copan, 20 uniface scrapers were identified in the residential zone (Willey et al. 1994:267), composing 2% of the sample.

Chopper (figure A-2 b, A-3 c, A-5 a, A-6 a)

***Frequency:*** 43 pieces (1% of the total sample)

***Weight:*** 5,130.2 g

***Description:*** Choppers (simple axes) are simple, functional tools without much need for elaborate processing. There was some effort expended on finishing these tools, however, with a whole 30% of the sample being cortex free.

The average width is 49 mm (24-71 mm), the average length is 72 mm (26-135 mm), and the average thickness is 28 mm (5-46 mm). While all examples were presumably produced for a specific function, only 67% of the sample has visible use wear.

***Intraregional Comparison:*** Choppers are present in small numbers at every site in the region. The examples from the San Francisco Hills and Tres Islas tend to be larger and longer (with at least a 40 mm difference in length and a 7-9 mm difference in width and thickness).

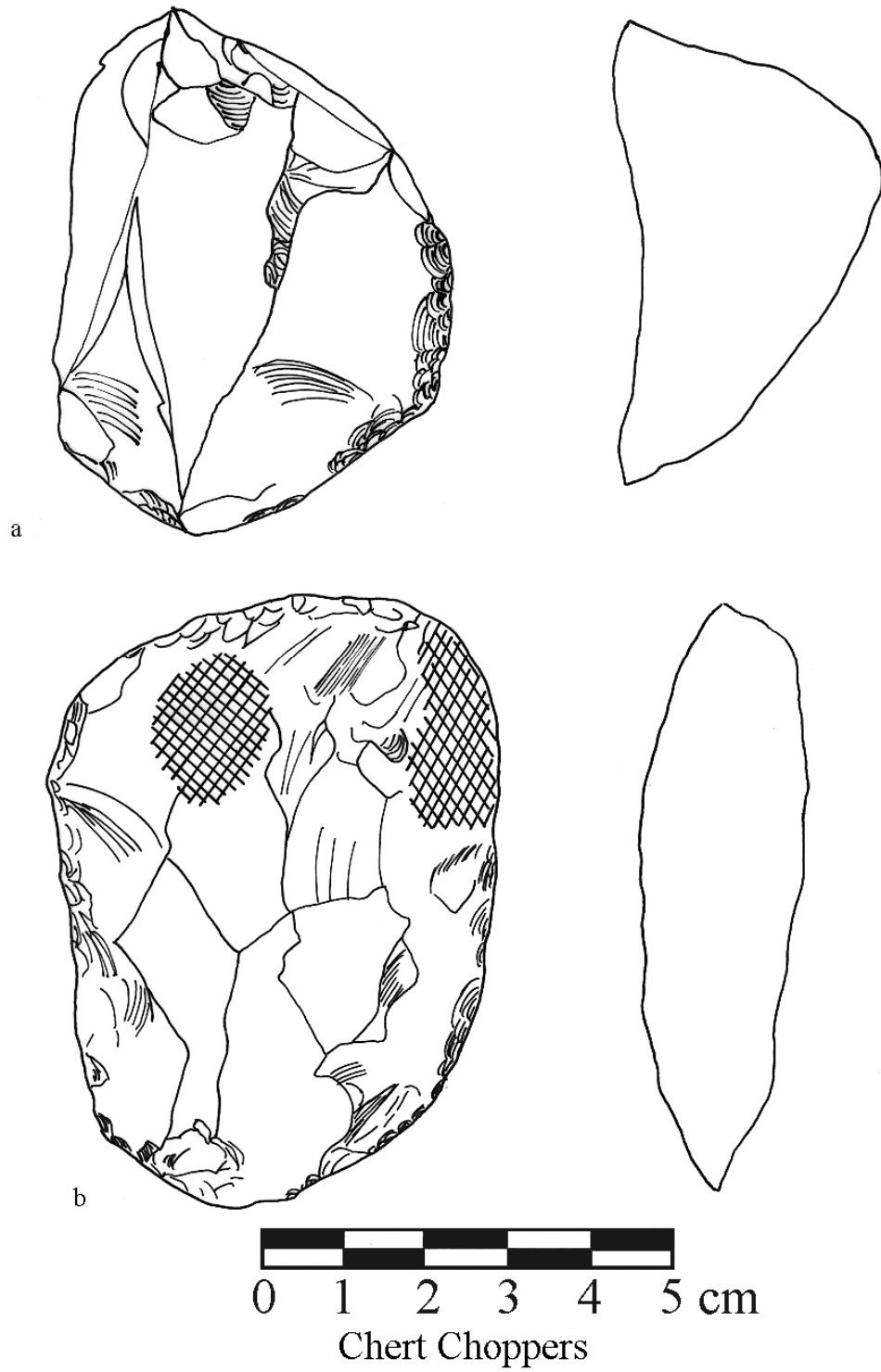


Figure A- 5: Chert Artifacts, a-b) choppers

***Interregional Comparison:*** Choppers (or celts) are the most common flaked stone tool in the Maya lowlands (M. Thompson 1991:147), and were most likely used for farming, chopping down trees, or as weapons (Ibid.:152). They are occasionally found in the highlands (Ibid.), although are completely absent at Copan, which has an uncharacteristically large number of chert objects at the site (Willey et al. 1994:264).

Choppers were rare at Tikal, however (only 12 examples), and were mostly found in the site periphery (Moholy-Nagy 2003:16). One chopper was found at Naj Tunich (Brady 1989:314-6).

General Biface (figure A-3 a, A-6 b)

***Frequency:*** 33 pieces (1% of the total sample)

***Weight:*** 1,514.2 g

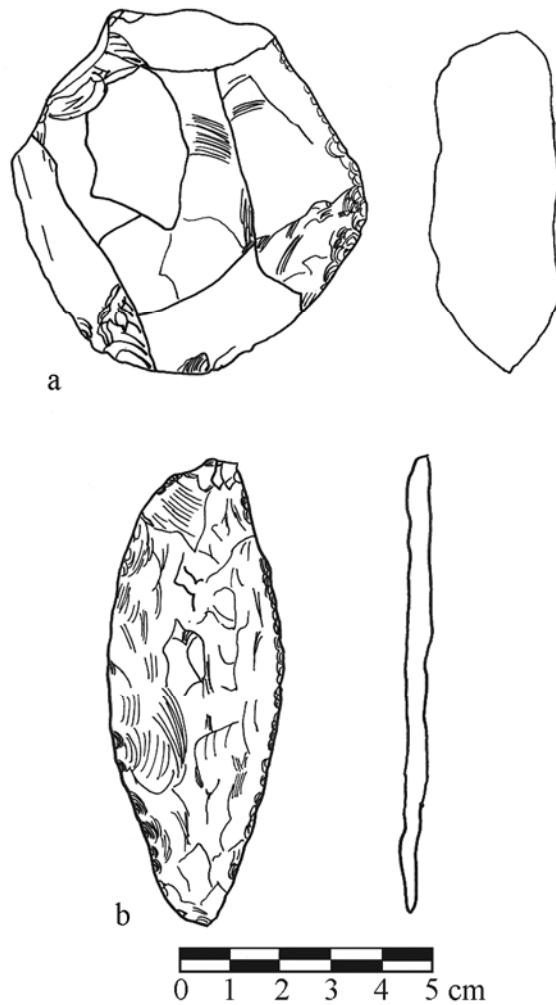
***Description:*** This category was created for bifaces that served an unknown function. They were, however, well-finished—76% of the sample is cortex-free. The average width is 35 mm (16-60 mm), the average length is 60 mm (21-139 mm), and the average thickness is 16 mm (6-33 mm). 88% of the sample has visible use wear.

***Intraregional Comparison:*** All of the bifaces in the caves were points (described above), but a small number of general biface types were found in La Lima, La Caoba Vieja, and Tres Islas.

Retouched Flake

***Frequency:*** 33 pieces (1% of the total sample)

***Weight:*** 850.9 g



Chert Artifacts

**Figure A- 6: Chert artifacts, a) chopper, b) general biface**

**Description:** These are flakes that were later further flaked to create a sharper edge, most likely to use as a scraper (the difference between retouched flake and scraper is somewhat arbitrary, but scrapers have an unequivocal use-wear and tend to be slightly larger). They tended to use flakes from further into the production process, as they normally had no (64%) or little (21%) cortex. The average width is 30 mm (11-58 mm), the average length is 52 mm (14-151 mm), and the average thickness is 13 mm (2-31 mm). 97% of the sample has visible use wear.

*Intraregional Comparison:* Retouched flakes were found at all sites north of Hun Nal Ye.

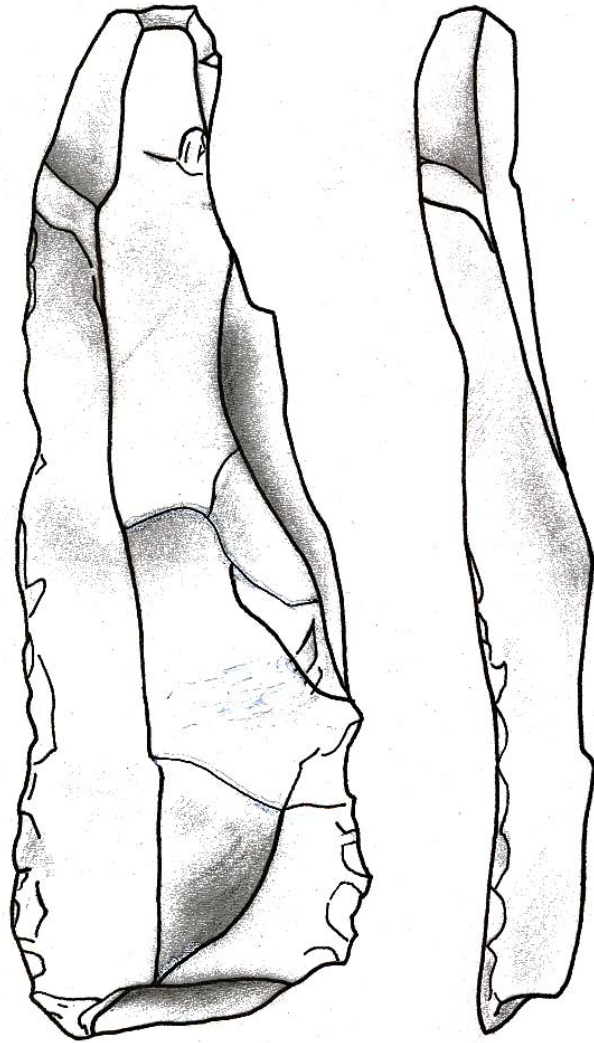


Chart Artifact

Figure A- 7: Chert Artifact



### Prismatic Blade Core

**Frequency:** 4 pieces (less than 1% of the total sample)

**Weight:** 941.5 g

**Description:** These cores are very distinct from the nuclei more common in chert production, being based instead on technology normally restricted to obsidian. It is likely that they, like obsidian nodules, were roughly processed before beginning to make prismatic blades, as only 1 of the examples has any evidence of cortex.

The average width is 60 mm (20-100 mm), the average length is 68 mm (22-119 mm), and the average thickness is 41 mm (14-86 mm). 75% of the nuclei have evidence of secondary use after they were spent, most likely as scrapers.

**Intraregional Comparison:** Chert prismatic blade cores have only been found in La Lima.

**Interregional Comparison:** Chert prismatic blades are very rare (see description above), and the blade cores are even rarer. At Tikal, Moholy-Nagy (2003:8) reported 40 chert blade cores and Fowler (1987:12) identified 61 at El Mirador. All of the cores from both of the sites were found in either Preclassic or mixed contexts (Ibid.).

### Drill

**Frequency:** 4 pieces (less than 1% of the total sample)

**Weight:** 88.6 g

**Description:** The “drills” are T-shaped chipped tools that come to a point that likely were used for drilling wood or other materials, although no use-wear analysis has been undertaken. The drills were normally cortex-free, although 22% of the sample did have a

small amount of cortex present on at least one side. The average width is 17 mm (10-25 mm), the average length is 45 mm (25-98 mm), and the average thickness is 8 mm (5-15 mm). All 9 drills have evidence of use.

***Intraregional Comparison:*** Drills were only found in the Candelaria Cave system and Tres Islas, raising the possibility that it was restricted to the Early Classic. With such a small sample, however, it is impossible to be sure.

***Interregional Comparison:*** 10 similar drills were found at Uaxactun (Kidder 1947:6), but at most sites the examples are different in form and size than the present sample.

At Copan, 5 drills were recovered in the residential zone—4 uniface and 1 biface—that taper to a point (Willey et al. 1994:267-8). An obsidian drill was reported at Seibal (Willey 1978:129), while at Tikal the only reported drill was ground quartzite (Moholy-Nagy 2003:44).

### Ball

***Frequency:*** 3 pieces (less than 1% of the total sample)

***Weight:*** 2.5 g

***Description:*** It is unclear what these balls were for, but they appear to have been produced and not found. The average diameters are 9 mm (8-11 mm). All are without cortex and none have use wear.

***Intraregional Comparison:*** This type was limited to a single cave in the Candelaria system, although they were found on 2 different entrances 6 km apart.

***Interregional Comparison:*** No similar balls have been found at other sites.

## Eccentric

**Frequency:** 2 pieces (less than 1% of the total sample)

**Weight:** 63.4 g

**Description:** “Eccentrics” are simply knapped stone artifacts that have an unusual shape and were likely decorative. Both of these were very simple, although only one was complete. One is cortex-free, the other has a small amount (25-50%) of cortex on one side. The measurements for the complete sample are 34 mm by 78 mm and 6 mm thick. One appears to have some evidence of use, likely as a scraper.

**Intraregional Comparison:** This type was limited to caves in the San Francisco Hills area.

**Interregional Comparison:** At least 225 eccentric flints (Coe 1959:17) and 337 obsidian flints (Ibid. 26) were reported at Piedras Negras. One was reported at Naj Tunich (Brady 1989:310) and 4 from Seibal (Willey 1978:102).

## **IV. Chipped Stone (Obsidian)**

Obsidian was one of the main materials used by the Maya to make tools, and from the beginning of Maya civilization has been traded into the lowlands. While chert is good for making stronger, longer-lasting tools, obsidian is rather fragile (being made of glass) and can hold a much sharper edge.

### *Sources*

Source identification was done visually by Woodfill and Monterroso with the assistance of a type collection created by Brigitte Kovacevich and raw nodules from

different sources donated by Brian Rudert and Edgar Carpio. Both Carpio and Claudia Wolley also provided valuable input throughout the process. Four sources were identified and are described below.

### El Chayal

This is the source of the vast majority of the obsidian in the region under study, composing 76% of the sample. It is located at the edge of the Valley of Guatemala (at present-day kilometer 25 along the Carretera al Atlántico, just outside of Guatemala City). The obsidian is gray and translucent with opaque black “ribbons.” Obsidian from this source was used for every artifact type in a distribution that corresponds with the general pattern of artifact distribution (prismatic blades makes up 79% of the sample while general bifaces and scrapers make up less than 1% of the sample put together).

### Ixtepeque

This source accounts for 22% of the present sample. It is also grayish, often with black imperfections, but its primary identifying characteristic is a highly glossy surface reminiscent of a glass coke bottle. Ixtepeque is located in the eastern highlands near the Guatemalan-Salvadoran border. Obsidian from this source was used for all artifact types except scrapers in a distribution that corresponds with the general pattern of type distribution (prismatic blades make up 83% of the sample and bifaces make up less than 1%).

## Pachuca

This source is the most exotic in the present sample, being located in the Valley of Mexico near Teotihuacan. It is possibly the most easily identified of the sources, having a distinct green tint, and is relatively common in the Maya world only in the Early Classic and the Terminal Classic through the Postclassic. All of the samples come from La Lima and are associated with the ultimate, Terminal Classic occupation. Obsidian from this source was only used to make prismatic blades (71% of the sample) and macroflakes (29% of the sample).

## San Martin Jilotepeque

This source is geographically the closest to the region under study, located near Los Cerritos Chijoj in the northern highlands. It is also the rarest, with only 5 examples present (all from La Caoba Vieja), most likely due to its poor quality for making tools and the fact that it is most easily brought into the lowlands through the Chixoy river system, west of the present area. The San Martin obsidian is typified by a brownish translucent color, the common presence of black specks, and a rough, matte surface. This source was only used to make prismatic blades (80% of the sample) and flakes (20% of the sample).

## *Regional Comparisons*

This distribution is similar to that found at Cancuen (Kovacevich 2006:284-7), although El Chayal was more common (87%) and Ixtepeque was rarer (6%). San Martin

Jilotepeque was somewhat more common (1%). Zaragoza (1%) and Pachuca (less than 1%) composed the rest of the Cancuen sample.

These sources are present to varying degrees at almost all sites. In the Central Petén Lakes during the Late Classic (Aldenderfer 1991:123-4), El Chayal is still the most common (70.1%), followed by San Martin Jilotepeque (18.2%), with Ixtepeque in third place (5.2%). In the Yucatan, Jilotepeque is present in small quantities in the Late Classic (about 3%), while El Chayal dominates throughout the Classic (72-85%). Ixtepeque is absent in the Early Classic and composes about 17% of the sample in the Late Classic (Nelson 1989:366).

Only 14 pieces of obsidian were sourced at Seibal (Graham et al. 1972), and San Martin Jilotepeque and El Chayal were the most common sources identified, although there was one example each of Ixtepeque and Zaragoza (in Central Mexico). It is unclear how representative of the total assemblage the selected pieces were, however, as it was not specified how the blades were picked.

In Alta Verapaz, 49 pieces were chemically sourced (Arnauld 1986:288); 94% were from El Chayal, 4% were from Jilotepeque, and the final piece (2% of the sample) was from Ixtepeque. The Jilotepeque examples dated to the Late Preclassic and the Late Classic, while the Ixtepeque example was Late Postclassic. Like Seibal, it is unclear how representative of the total assemblage the selected pieces were—they only represent 1.7% of the entire sample.

At Copan, as would be expected, the vast majority of the sample comes from the nearby Ixtepeque source (Harbottle et al. 1994:445).

## *Obsidian Artifacts*

All of the artifact types that were reported below are common throughout the Maya world and were also reported at Cancuen (Kovacevich 2006).

### Prismatic Blade

**Frequency:** 1763 (80% of the total sample)

**Weight:** 1,833.5 g

**Description:** Obsidian prismatic blades were the sharpest tool created by humans before the advent of the laser. As they are knocked off of the primary core, more ridges accumulate, which are the points at which a blade is removed. The present sample has blades with between 0 and 8 ridges, but the majority of the sample has 2 (62%, with 99% of the sample with between 1 and 3 ridges).

The blades most commonly show some signs of use (44%), although 24% have no visible use wear, 8% are worn out, and 2% have been retouched. The average width is 12.2 mm (3.7-46.5 mm), the average length is 29.9 mm (4-80.1 mm), and the average thickness is 3.2 mm (1.3-8.5 mm). The blades are most commonly made with obsidian from el Chayal (76%), although Ixtepeque (23%) is common and Pachuca and San Martin Jilotepeque are rare but present (together forming about 1% of the sample).

The majority of the sample has two ridges (62%), with 99% of the blades having between 1 and 3 ridges.

**Intraregional Comparison:** This artifact type makes up the lion's share of the artifacts at every site except Tres Islas, where it is absent (at least in the part presently under investigation). It is the exclusive type in the Hun Nal Ye sample. As would be expected,

obsidian blades are much more worn in domestic contexts than ritual ones—the percentage of blades without evidence of wear is 50% in Candelaria and 63% in caves in the San Francisco Hills, compared to 14% in La Caoba Vieja and 19% in La Lima.

The blades from Candelaria are much longer than the average (51.5 mm), as are those from the central part of the San Francisco Hills (40.0 mm). The others average between 25.3 mm (the eastern part of the San Francisco Hills) and 29.0 mm (at La Lima). Carot (1987:60) reported 2 recovered in the Candelaria Caves during her survey.

***Interregional Comparison:*** Obsidian prismatic blades are common at most Maya sites, although they do not often dominate the sample to the extent that they do here. At Seibal they make up 61% of the sample, whereas at Tikal they are far overshadowed by flakes and make up only 16% of the assemblage, although they are found in all contexts at the site (Moholy-Nagy 2003:34).

In the highlands, blades are also the most common obsidian tool. Prismatic blades make up 27% of the sample in Jutiapa (Bond 1989:97), 95% of which has 2 ridges (the other 5% has a single ridge). In Alta Verapaz, prismatic blades make up 17% of the total sample and 25% of the blades have been retouched (Arnauld 1986:287). In the Salamá Valley blades make up 19% of the sample (Sharer and Sedat 1987:334). In the Nebaj region (Becquelin et al. 2003:81), all but one cached vessel dating to the Batz phase (Late Classic) contained prismatic blades and 4 of the 11 tombs did as well. The same authors also reported 2 Classic-period tombs with obsidian blades at Nebaj as well as one Early Classic tomb from Holmul and 3 general Classic tombs in Santa Cruz Verapaz.



The sample at Santa Leticia is the most like the present assemblage, with obsidian blades representing 71% of all of the obsidian found (Valdez 1986:211). The sample in the Copan residential zone is similar, with blades composing 61% of the sample (Valdez 1994:273).

### Flake

**Frequency:** 357 (16% of the total sample)

**Weight:** 416 g

**Description:** The flakes are most likely the result of processing the obsidian nodule for prismatic blade manufacture or the byproducts of knapping other tools such as bifaces and scrapers. 60% of the flakes do have ridges, however, although they are likely from other flakes and not from prismatic blade production. While 75% of the flakes appear to be purely refuse, there are some with evidence of use (25%), a few of which were worn out or retouched (about 1% for each).

The average width is 13.8 mm (2.7-33 mm), the average length is 18.5 mm (.5-114.1 mm), and the average thickness is 4.3 mm (.8-12.9 mm). The flakes most commonly come from El Chayal (79%) or Ixtepeque (21%), although San Martin Jilotepeque (less than 1%) is also occasionally present.

**Intraregional Comparison:** Flakes are found at every site in the region with the exception of Hun Nal Ye and Tres Islas. As seen in the interregional comparisons below, flakes normally make up the majority of the sample, so a separate count was done eliminating the ritual shrines, but this had very little effect—18% of the settlement sample are flakes.

***Interregional Comparison:*** The quantity of obsidian flakes contrasts among different sites—it forms 26% of the sample at Seibal (Willey 1978:124), while flakes make up 79% of the assemblage at Tikal (Moholy-Nagy 2003:26).

In the highlands, when a full description of the sample is reported, flakes make up the majority of the sample. In Jutiapa, they compose 70% of the assemblage (Bond 1989:98), and in Alta Verapaz they make up 77% (Arnauld 1986:286-7). They make up 78% of the Salamá Valley sample (Sharer and Sedat 1983:334-5) and 22.4% of the sample at Santa Leticia (Valdez 1986:211). Flakes compose 36% of the sample in the Copan residential zone (Valdez 1994:273), 3% of which was utilized, likely as scrapers.

#### Macroflake

***Frequency:*** 39 (2% of the total sample)

***Weight:*** 94.9 g

***Description:*** These are simply large flakes, most probably related to processing cores or production of points. They have between 0 and 4 ridges, but most commonly 2 (54%), but, as with simple flakes they are most likely to be scars from simple flake removal, not from the manufacture of prismatic blades. 77% of the sample has some evidence of wear, which is most commonly from heavy use (69%).

The average width is 24.2 mm (12.8-38.1 mm), the average length is 27.0 mm (12.1-40.8 mm), and the average thickness is 9 mm (1.2-21.8 mm). The sample is most commonly from El Chayal (82%), although Ixtepeque (13%) and Pachuca (5%) are also present.

***Intraregional Comparison:*** Macroflakes were only found in the two settlements, La Lima and La Caoba Vieja.

***Interregional Comparison:*** Macroflakes are presumably common at all sites where obsidian nodules are processed or refined, although they are likely incorporated into the general “flake” or “debitage” category. They are present but extremely rare at Tikal (6 examples out of 51,426 pieces).

Prismatic core

***Frequency:*** 36 (2% of the total sample)

***Weight:*** 467.2 g

***Description:*** These are the remnants of processed nodules used to make prismatic blades. They have between 2 and 15 ridges, with a cluster between 3 and 4 (31%) and another between 11 and 12 (19%). While the majority of the cores have no use wear (69%), a small portion of the sample has some wear (14%) or is completely worn out (17%).

The average width is 21.9 mm (7.1-32.9 mm), the average length is 58 mm (8.9-92.4 mm), and the average thickness is 13.2 mm (1-19.1 mm). All of the cores are from El Chayal (86%) and Ixtepeque (14%).

***Intraregional Comparison:*** One core fragment was found in the Candelaria Caves and the rest were from La Lima or a single cache at Tres Islas (and make up the only obsidian artifacts from the site in the present study). Cores from Tres Islas were much longer (80.3 mm vs. 24.5 mm) than those at La Lima.

***Interregional Comparison:*** Wasted prismatic cores often appear to have had a ritual importance, as they were commonly left in caches and other sacred contexts.

Prismatic cores made up 4% of the sample at Tikal, and 80% of the sample was found in special deposits in the site's epicenter (Moholy-Nagy 2003:32). At Piedras Negras (Coe 1959:14) and Uaxactun (Kidder 1947:20), they were commonly found in caches.

They make up 1% of the sample in Jutiapa (Bond 1989:98). Only 9 were found (out of 2860 pieces of obsidian) in Alta Verapaz by Arnauld (1986:287). 36 were found in the Salamá Valley (1% of the sample), one in a cache (Sharer and Sedat 1983:335). Many of the examples from Nebaj were reported to have come from caches (Kidder 1951:50). 38 cores were found in the Copan residential zone comprising 1% of the sample (Valdez 1994:273). Cores were cached underneath several stelae and zoomorphs at Quirigua (Strómsvik 1942), and were found inside an Early Classic ceramic box at Guaytan (Smith and Kidder 1943).

Flake with cortex

***Frequency:*** 12 (1% of the total sample)

***Weight:*** 24.2 g

***Description:*** Since obsidian comes into the lowlands from such great distances, most of the cortex, which is just excess weight, is removed at or near the source. These flakes are the few that still have cortex and represent the first part of production. The sample is normally without ridges, although 17% of these flakes have one ridge. 17% of the sample has slight wear and 17% has been retouched. The average width is 21.1 mm (9.4-

39.7 mm), the average length is 18.6 mm (7.9-34.4 mm), and the average thickness is 5.4 mm (1.5-9.5 mm). All of the flakes with cortex come from El Chayal (91%) or Ixtepeque (9%).

***Intraregional Comparison:*** The only flakes with cortex in the region come from Candelaria and La Lima. The sample from Cancuen is nearly identical, with 1% of the obsidian material having cortex (Kovacevich 2006:291).

***Interregional Comparison:*** In Alta Verapaz, 2.4% of the total sample had evidence of cortex (Arnauld 1986:286-7). In addition, 9 of the retouched flakes had cortex present (Ibid. 288). One prismatic blade with some nucleus was reported in the Nebaj region (Becquelin et al. 2003:272).

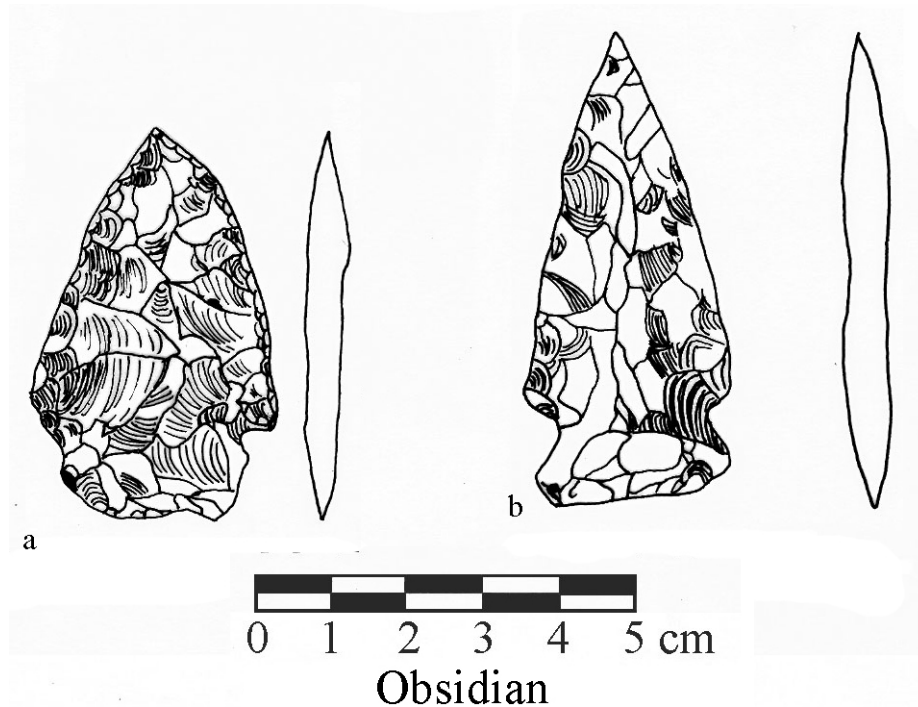
Biface (figure A-8 a-b)

***Frequency:*** 2 (less than 1% of the total sample)

***Weight:*** 22.6 g

***Description:*** Both of the bifaces are arrowheads, although they have no or little evidence of use. The average width is 2.9 cm (2.7-3.10 cm), the average length is 5.5 mm (4.9-6.1 cm), and the average thickness is 7.3 mm (6.7-7.8 mm). The obsidian comes from El Chayal or Ixtepeque.

***Intraregional Comparison:*** Both of the bifaces are from La Lima, although Carot (1987:60) reported part of a biface from the Candelaria Caves recovered in the 1970s.



**Figure A- 8: Obsidian bifaces**

***Interregional Comparison:*** Obsidian bifaces have been found at virtually every site in the Maya world and size seems to vary more according to use and blank size than region.

### Scraper

***Frequency:*** 2 (less than 1% of the total sample)

***Weight:*** 8.7 g

***Description:*** These were often informal tools made of flakes with no other special processing involved. The two examples here had either 1 or 2 ridges and some or much evidence of use. The average width is 20.7 mm (13.2-28.2 mm), the average length is 27.5 mm (24.9-30 mm), and the average thickness is 5.6 mm (2.2-9 mm). Both of the scrapers were made of El Chayal obsidian.

***Intraregional Comparison:*** All of the scrapers are from La Caoba Vieja.

***Interregional Comparison:*** Like chert scrapers, it is probable that they are found at every site where obsidian processing was occurring, although they were not always reported.

Only 87 scrapers were found at Tikal (Moholy-Nagy 2003:26). They make up 2% of the sample in Jutiapa (Bond 1989:98) and are rare but present in Alta Verapaz (Arnauld 1986:288). In the Copan residential zone, scrapers made up less than 1% of the sample (Valdez 1994:273).

## **V. Groundstone**

Many of the necessary tools for food and pigment production were made from various stones with a naturally rough surface—basalt, granite, limestone, and sandstone. While local materials were often used, basalt and granite were preferred, especially for food production, as corn and other materials ground with limestone and sandstone would often be gritty, which, from the skeletal evidence, resulted in very well-worn teeth.

Moholy-Nagy (2003:38) reported that manos and metates were regularly pecked in order to maintain the coarse surfaces necessary for grinding. Most of the broken examples, she proposes, were victims of an untrained hand trying to roughen the tools.

### Metate

***Frequency:*** 90 examples (51% of the sample)

***Weight:*** 41,145.9 g

***Description:*** Metates are large flat or bowl-shaped stones used for grinding corn and other foodstuffs. The ideal metates were made out of basalt or granite, as they were

much harder and longer-lasting, although locally-available, softer stones have been used even though they tend to add grit to the food, leading to rapid tooth wear. In the present sample, sandstone accounts for 62% of the sample, followed by basalt (30%), with rare occurrences of granite (2%), and brecciated limestone (2%), with 4% being made from unidentified materials. The vast majority of the sample shows medium evidence of wear (97%), although a small amount of the sample appears to have been unused. The average width is 132 mm (64-200 mm), the average length is 212 mm (73-350 mm), and the average thickness is 23 mm (19-28 mm).

***Intraregional Comparison:*** Metates are present at all of the sites in the region north of Hun Nal Ye. Access to high-quality stone for metates was scarce in the region and most of the best pieces were brought to the caves and broken. Sandstone is the most common material used at La Lima and La Caoba Vieja (67% and 75%, respectively) and was used to make one of the two metates in the San Francisco Hills, but is otherwise absent at other sites. Basalt was used for 86% of the Candelaria sample and is present but not dominant at all of the other sites. Granite is extremely rare with only 2 examples (one from Candelaria and the other from La Caoba Vieja). Brecciated limestone was used to make 2 metates at La Caoba Vieja as well. Only 2 manos were complete—one from La Lima and the other from Finca Alux, a site near Tres Islas. Carot (1987:60) recovered part of a “turtleback” sandstone metate during her survey of the Candelaria Caves.

***Interregional Comparison:*** Metates are a standard Mesoamerican tool reported at virtually every site that has been excavated (and is still found in almost every Maya and ladino household in Mesoamerica today). The most common type of metate is normally referred to as having a “turtleback” form—a trough with a convex base. It composes the



majority of the sample at sites in the lowlands—at Seibal (Willey 1978:59), Tikal (Moholy-Nagy 2003:39-41), Uaxactun (Kidder 1947:33) and Piedras Negras (Coe 1959:34).

Thin, flat metates (Willey 1978:62-5) were also reported at Seibal with a tripod base, which appears in the Late Classic, although they begin in the Early Classic at Tikal (Moholy-Nagy 2003:39-41). They are present with unknown chronology at Piedras Negras (Coe 1959:34) and Uaxactun (Kidder 1947:33).

Block metates are also occasionally present at Tikal, Piedras Negras, and Mayapan (Moholy-Nagy 2003:39-41), and have deep troughs.

At Seibal (Willey 1978:59-65), quartzite is the most common material, although conglomerates, limestone, sandstone, and basalt are all common (although the thin, flat form is most commonly basalt). At Uaxactun, limestone is the most common followed by granite, although basalt is normally used for the smaller tripod metates.

At Tikal, the material used to make the metate often determines the form, although quartzite and sandstone are the most common types. The same pattern is found at Piedras Negras. Of the three different types identified by Coe, each was reported to be associated with a particular material—limestone turtlebacks, basalt flat tripods, and small sandstone tripods. Fragments of metates were found in Early and Late Classic burials and problematic deposits (Moholy-Nagy 2003).

Two metates were recovered at Naj Tunich (Brady 1989:303)—a turtleback probably made from a broken speleothem and a shallower vessel made from granite with evidence of grinding on both sides.

Five turtleback metates made from basalt were identified in the Preclassic sample from Jutiapa (Bond 1989:99). One complete metate of the same form was found in Alta Verapaz (Arnauld 1986:282) measuring 57 cm by 33.8 cm by 7 cm. In Los Cerritos Chijoj, several metates were reported which were 10-12 cm thick, 23-40 cm long, and about 60 cm wide (Ichon 1992:208).

In the Salamá Valley, there was a large variety of forms found—turtle-back (20%), flat (4%), and raised-rim (2%). The rest were legged metates dating to the Postclassic (Sharer and Sedat 1983:338). All of the examples were schist with the exception of 1 turtleback and some of the Postclassic examples, which were made from basalt.

At Santa Leticia (Demarest and Potscher 1986:206-7), 60% of the metates were turtlebacks and the rest of the sample was flat (30%) or a deep trough (10%). All were made from vesicular andesite. At Zacualpa (Wauchope 1975:41), two different varieties were described—small, well-done examples made of basalt and large, crude examples made of schist. While no metates were reported from Nebaj (Kidder 1951), there are several tuff metates with tripod bases that were found in the surrounding region (Becquelin et al. 2003:195). 60 metate fragments of unknown shapes were reported by Kidder et al. (1946:140).

At Copan, the most common type was flat and rectangular with an inverted trapezoidal profile or curved base. Legged versions of this type were also reported, as was a more delicate version and the ubiquitous turtleback shape (Willey et al. 1994:227-33).

## Mano

**Frequency:** 53 examples (30% of the sample)

**Weight:** 23,580 g

**Description:** Manos are the cylindrical stones that are used to grind foodstuffs against the metate. Like metates, the ideal material is a hard, volcanic rock (basalt or granite), but other local resources were often used. Basalt and sandstone each compose 40% of the sample, with the other 20% being made up of limestone (8%), quartz (4%), granite (4%), green volcanic stone (2%), and chert (2%). The majority of the sample has medium evidence of wear (87%) and 6% is completely worn out. There are three distinct wear patterns based on idiosyncratic use—while the majority (72%) have even distribution of wear, 20% of the sample was used mostly on 2 sides (producing a flat mano) and 9% have wear on 5 different sides (producing a pentagonal mano). 8% of the sample has no evidence of use wear. The average width is 54 mm (48-65 mm), the average length is 138 mm (102-190), and the average thickness is 45 mm (37-54 mm). The one complete mano with a pentagonal wear pattern has a width of 64 mm, a length of 250 mm, and a thickness of 42 mm. These manos were also made from finer material—basalt or granite.

**Intraregional Comparison:** Manos are present at every site in the region with the exception of Hun Na Ye and Tres Islas. The round- and flat-worn varieties are the most widespread in distribution, while the pentagonal manos are present in Candelaria (1 example), La Lima (1 example), and La Caoba Vieja (2 examples). The only complete manos were found at La Lima (where they only comprised 8% of the sample).

Access to quality stone to make manos seems to have been lacking in the region and most of the best examples were broken and left in caves. The manos from the settlement tended to be made of poorer quality stone, with sandstone comprising half of the sample from La Lima and 47% of the sample from La Caoba Vieja. Other local resources—chert and quartz—were also used at the settlements (a quartz mano was also present in the San Francisco caves). The rarest materials used are green volcanic stone (normally used to make the groundstone hand-axes described below), which was used to make one mano at La Lima and granite, which was used to make 2 manos in La Caoba Vieja.

Carot (1987:60) recovered 3 ovoid and 3 sub-circular mano fragments during her investigation of the Candelaria Caves, all of which were made of sandstone.

***Interregional Comparison:*** The most complete study of manos was undertaken by Moholy-Nagy (2003:37-9) at Tikal. Unlike other analyses, she attempts to determine the original worked form of the manos before they are used, and divides the sample into 5 varieties, labeled V to Z. V, the most common type, is initially square with four working edges but as it is worn the profile begins to resemble a trapezoid, diamond, triangle, pentagon, or an irregular shape. W is thinner and is only used on one or 2 faces. X is larger and cruder in the cross-section and only has one face that is used. Y is round or oval and was used with a flat metate, and Z was bi-convex, and is likely simply eroded examples of V, W, and Y manos. V and W were present during the entire occupation of Tikal (V being the most common through Tepeu 1) and Y is present only from the Early Classic through the Terminal Classic. Two-thirds of the sample was made from quartzite and most of the rest was limestone.

At Piedras Negras, the most common (and only described) form is oval (Coe 1959:34). At Uaxactun (Kidder 1947:33-4), the majority were quadrangular with all four sides demonstrating use-wear, although some flat samples were found as well. Most were made of limestone, although several were granite.

At Seibal, Willey (1978:65-76) divided the sample into thin-rectangular (4%), thick ovate-rectangular (57%), square (24%), pentagonal (3%), overhang (1%), and round (11%). All are made from the same materials described for metates above with the exception of the “overhang” manos, which are made from a well-polished gray stone that might have been schist. None were complete, and it is possible that they were in fact examples of the “groundstone hand axes” described below.

At Naj Tunich, 4 manos were recovered (Brady 1989:304-5), 2 ovoid made from granite, 1 plano-convex made from granite, and a thin-rectangular made from limestone.

In Jutiapa, three basalt manos were reported (Bond 1989:99) with either ovoid or rectangular profiles. In western Alta Verapaz, 10 mano fragments and 1 complete mano were identified by Arnauld (1986:283). All were flat with 2 sides evincing use-wear. In the Salamá Valley (Sharer and Sedat 1983:336-8), biconvex, flat, ovoid, and plano-convex examples were found. Many appear to have been reused as pounding stones. Both basalt and schist were fairly evenly used. At Santa Leticia, the manos were rectangular (71%), oval (16%), or circular (13%) and were all made of vesicular andesite (Demarest and Potscher 1986:201-6).

At Copan, Willey found 7 different types of manos. The most common were ovate-rectangular (49%), followed by round (19%), plano-convex (18%), pentagonal

(6%), triangular (3%), or square (2%). An additional type had an overhang on one side, and composed 3% of the sample.

Manos were reported but not described at Los Cerritos Chijoj (Ichon 1992:210) and at Zacualpa (Wauchope 1975:41) all of the manos were made of basalt, granite, and schist. One Late Classic example was hexagonal and made of schist. The rest had only one side with use-wear. All of the examples from the Nebaj region appear to have been made from tuff (Becquelin et al. 2003:65), while the one example recovered from Nebaj itself was rectangular in profile and made from basalt (Kidder 1951:65). It dates to the Late Classic. At Kaminaljuyu, 100 mano fragments were found at Kaminaljuyu (Kidder et al. 1946:140) with one or two sides showing use-wear. Ichon (1982:173) reported a rectangular mano at Los Encuentros.

#### Flake

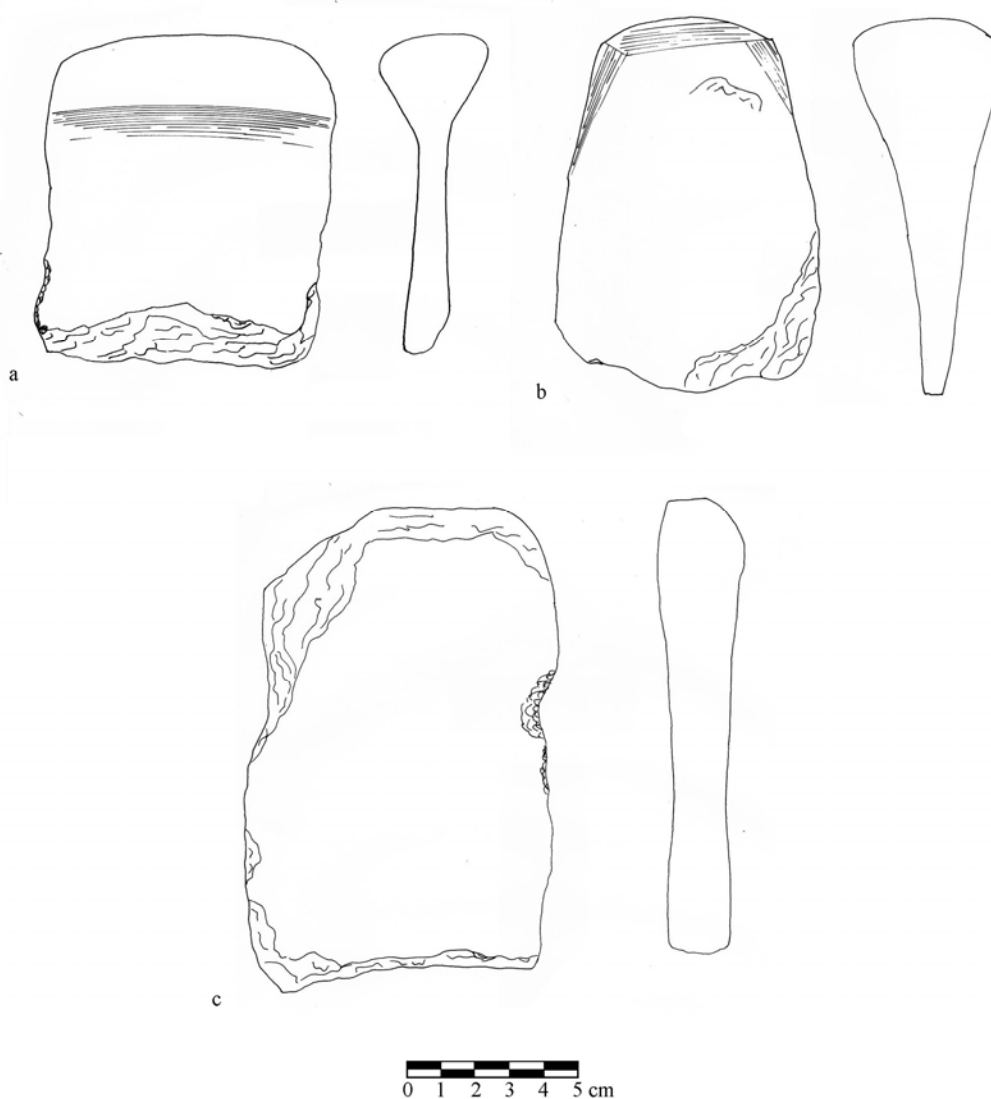
**Frequency:** 15 examples (8% of the sample)

**Weight:** 1,522.9 g

**Description:** It is unlikely that the flakes in the present sample are intentional—most seem to be parts of broken groundstone hand-axes (see the following category), and all are made of green volcanic stone. The fact that 67% of the sample is completely worn out strengthens this hypothesis. 20% of the sample is unworn and most likely comes from closer to the base.

**Intraregional Comparison:** Flakes are only present at La Lima.

**Interregional Comparison:** Flakes have not been reported at other sites



Groundstone Hand-Axes

**Figure A- 9: Groundstone Hand-Axes**

Groundstone Hand-Axe (figure A-9)

**Frequency:** 7 examples (4% of the sample)

**Weight:** 1,676.2 g

**Description:** These hand-axes have long, flat bodies, a rounded, wide base (for gripping), and a sharp edge, which has been worn down in 43% of the sample (the other

57% has medium use wear). They were likely used instead of or in addition to chert choppers or axes. 86% of the sample was made of a green volcanic stone, although one of the axes was made from granite. The average width is 75 mm (61-95 mm). The length and thickness were not able to be generalized in the present sample, however, as the handle is not always present and the edge is always shattered. Most of the lengths are between 94 and 107 mm and the thicknesses are between 25 and 42 mm, with the handles at the larger end of the spectrum and the shaft body at the smaller end.

***Intraregional Comparison:*** These axes are present at La Lima, La Caoba Vieja, and Tres Islas. They appear to have been manufactured in the Late Classic, but 71% of the sample comes from La Lima. The example from Tres Islas is made of granite instead of the usual green stone.

***Interregional Comparison:*** While a few “overhang manos” from Seibal might be examples of this tool type, the only other definite examples are found in 2 private collections in Carcha, Guatemala (pers. obs. 2005); according to the collectors, they were acquired locally.

### Pestle

***Frequency:*** 6 examples (3% of the sample)

***Weight:*** 193.4 g

***Description:*** These pestles were found at La Lima and were likely used with the mortars described above. They were made from an unknown stone.

***Intraregional Comparison:*** All of the pestles were from La Lima.



***Interregional Comparison:*** The pestles at Los Cerritos Chijoj were normally short with evidence of use at both ends (Ichon 1992:210), while the Salamá Valley examples were conical with wear present only on the rounded base (Sharer and Sedat 1983:340). The pestles from Kaminaljuyu were *ad hoc* (Kidder et al. 1946:141), whereas they were cylindrical at Copan (Willey et al. 1994:246-7).

### Mortar

***Frequency:*** 3 examples (2% of the sample)

***Weight:*** 750 g

***Description:*** Use wear on these small stone rods indicates that they were most likely used as small mortars. One example was made from limestone, and the other two from an unidentified material. The average width is 93 mm (91-95 mm), the average length is 97 mm (91-103 mm), and the average thickness is 35 mm (29-41 mm). 6 pestles were also found at La Lima (see below) and were probably used in tandem.

***Intraregional Comparison:*** These mortars are present at La Lima and La Caoba Vieja.

***Interregional Comparison:*** Mortars are commonly reported at Maya sites. Twenty-one were found at Seibal (Willey 1978:76-8), 11 at Tikal (Moholy-Nagy 2003:36), and an unspecified amount at Uaxactun (Kidder 1947:35). One mortar was found in Alta Verapaz (Arnauld 1986:283) and several were reported at Kaminaljuyu (Kidder et al. 1946:141) and Copan (Willey *et al.* 1994:239-41).

### Doughnut

***Frequency:*** 2 examples (1% of the sample)

**Weight:** 1025.5 g

**Description:** One is limestone; the other is of an unknown material. The example that was nearly complete had a diameter of 43 mm and a wall thickness of 26 mm.

**Intraregional Comparison:** Both were found in caves, one in the San Francisco Hills and the other in the Candelaria system.

**Interregional Comparison:** Doughnuts have been reported at most Maya sites—Seibal (Willey 1978:90-3), Tikal (Moholy-Nagy 2003:48), Alta Verapaz (Arnauld 1986:283), Zaculeu (Woodbury and Trick 1953:224, quoted in Arnauld 1986), the Salamá Valley (Sharer and Sedat 1983:340-1), Zacualpa (Wauchope 1975:39), Nebaj (Kidder 1951:65), Los Encuentros (Ichon 1982:173), Kaminaljuyu (Kidder et al. 1946:141), and Copan (Willey et al. 1994:250).

The 20 Seibal examples were made of limestone and were of varied size, from small (less than 5 cm diameter) to large (over 9 cm diameter), although almost all of the examples fell between 5 and 9 cm. At Tikal, each of the 11 doughnuts were highly standardized in size—the diameter was between 6.8 and 7.1 cm and the thickness was between 5 and 5.4 cm. They were produced between the Late Preclassic and the Terminal Classic and, with the exception of one basalt example, all were made of limestone. Since many of the doughnuts from Tikal were carved, painted, or otherwise decorated, Moholy-Nagy (2003:48) proposed that they were mace-heads.

In Alta Verapaz, the single example had an 8 cm diameter and was 4.6 cm. thick. They were slightly larger in the Salamá Valley, with a diameter of 9.2-11.6 cm and a thickness of 3.2-9.1 cm. At Zacualpa, a doughnut was found with a 20 cm diameter and a 7 cm hole. It dated to the Late Classic. Another was reported at Nebaj with a 13 cm.

diameter and a 3-5 cm. hole. At Los Encuentros, Ichon reported one complete rhyolite doughnut and one fragment. The doughnuts from Kaminaljuyu were made from basalt. The 5 doughnuts from Copan have relatively standard diameters—11 to 13.5 cm.

### Fishing Weight

**Frequency:** 1 example (1% of the sample)

**Weight:** 800 g

**Description:** The piece, made from basalt, had a smoothed surface and tapered to a dull point on either side. There was a deep groove carved into the midsection of the weight. It was 15 cm wide, 43 cm long, and 12 cm thick.

**Intraregional Comparison:** This was found at Cerro Ávalos, a site near Tres Islas on the Río Pasión.

**Interregional Comparison:** A single weight was found at Copan with a groove towards one end. It was 13 cm by 6.7 cm.

### Spindle Whorl

**Frequency:** 1 example (1% of the sample)

**Weight:** 10.2 g

**Description:** This stone disk was most likely used as a base around which twine or string was wrapped. It is 25 x 31 x 11 mm.

**Intraregional Comparison:** This spindle whorl was found in La Lima.

**Interregional Comparison:** Stone spindle whorls have been found at most sites in the Maya world.

## **VI. Jade**

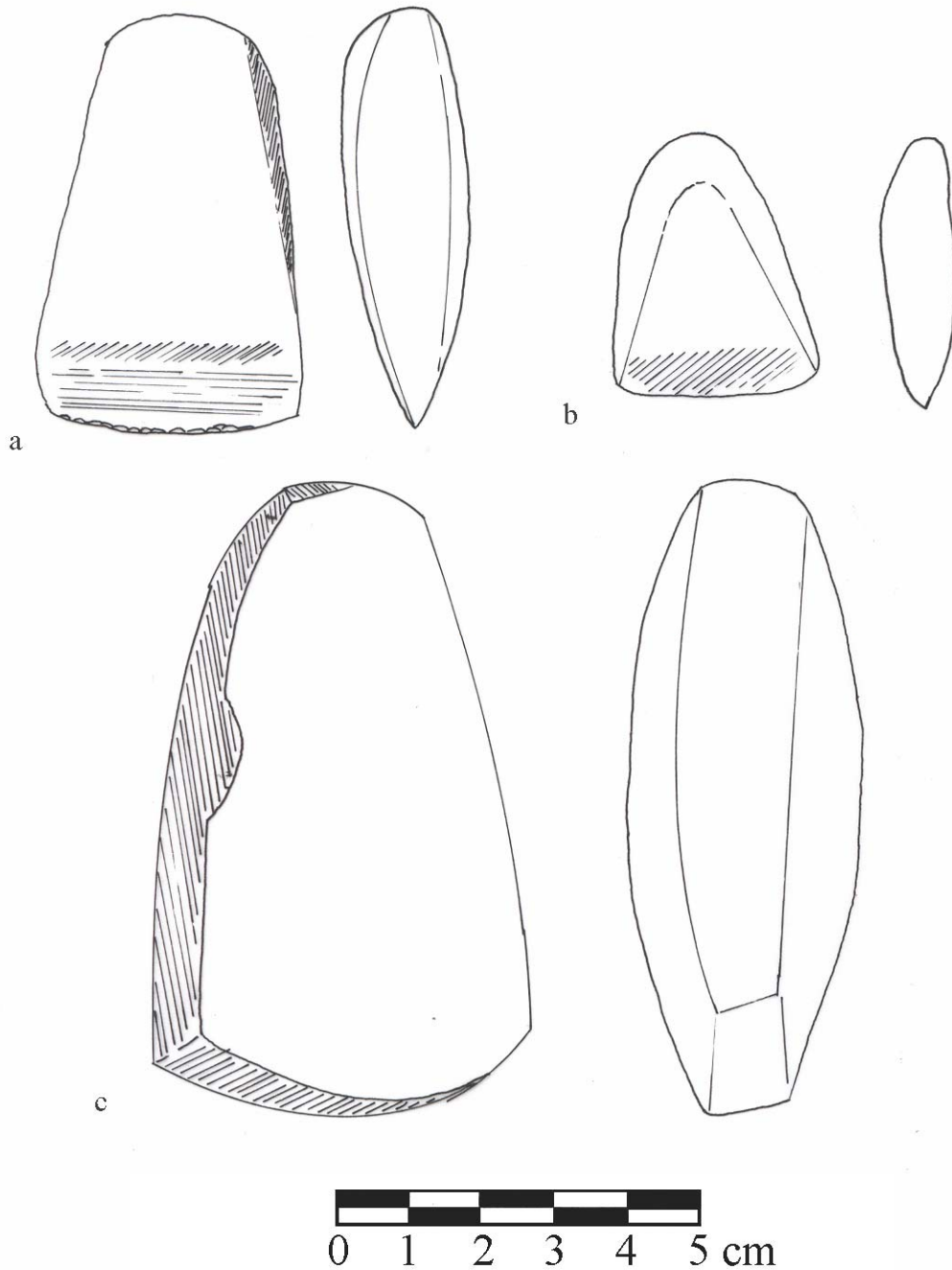
Jade was commonly used to make both tools and sumptuary goods. Since it is often unclear which of the materials were made from true jadeite and which are related stones, many archaeologists have taken to using the term “greenstone” as a term for jade or jade-like stones that the Maya seemed to use in identical fashions. The term was meant to replace the colloquial “jade,” which technically is only jadeite (common in Central America) or Nephrite (only found in Asia). While it has gained acceptance in recent years, it is still somewhat of a misnomer, as it is often not green—blue, black, gray, and even white varieties are present. Lang (1993:1) suggests that “jade” and “social jade” be used to distinguish the two, which I agree with. Since I have not run tests to determine which stones are present in the sample, however, I simply use the generic term “jade” to imply both types. It appears that color might have been more important than the actual material used (c.f. Kovacevich 2006:129-30).

One of the problems with greenstone artifacts in cave contexts is that they (along with whole vessels) are normally the first to be looted. The quantity of jade adzes that locals have attempted to sell me coupled with stories of the Japanese man who spent several weeks in the region in the late 1990s paying people to find “door jambs” (apparently adzes) furthers this suspicion.

Adze (figure A-10, *a-c*)

**Frequency:** 20 examples

**Weight:** 689.9 g



**Figure A- 10: Jade Adzes**

**Description:** There is a slight preference for dark green (50%) over a grayish green (40%), and 10% of the sample is made from apparently tan greenstone. 42% of the sample has evidence of use (apparently as a percussive) and only 30% of the examples are complete—the rest are fairly evenly distributed between proximal, medial, and distal

fragments. The average width is 36 mm (28-54 mm), the average length is 65 mm (34-89 mm), and the average thickness is 19 mm (12-34 mm).

***Intraregional Comparison:*** Adzes were found in the Candelaria Caves, La Lima, and La Caoba Vieja. Both of the recovered adzes in the Candelaria Caves were a dark green, which was the most common color at La Lima (47% of the sample). The one example from La Caoba Vieja was grayish green, which was also common at La Lima (41% of the sample). The tan examples were also from La Lima. Both of the samples from Candelaria had evidence of use, while the majority of the adzes from La Lima (65%) did not. The adze' dimensions vary more within an individual site than among the sites.

Jade adzes were “fairly evenly distributed throughout” Cancuen (Kovacevich 2006:174) and Kovacevich (ibid.) reports some evidence of adze production there.

***Interregional Comparison:*** This is a very common artifact type and has been reported at most Maya centers. Thirty-three jade adzes (“celts”) were identified at Seibal (Willey 1978:86-9) with lengths of between 3 and 13 cm. They are common at Tikal (Moholy-Nagy 2003:44-5), Uaxactun (Kidder 1947:38-9), Naj Tunich (Brady 1989:298), and Piedras Negras (Coe 1959:51).

Two Preclassic adzes were found in Jutiapa—1 light gray and 1 blue-green (Bond 1989:98-9). 14 were found in Alta Verapaz (Arnauld 1986:283-4). 59 adze fragments were found in the Salamá Valley (Sharer and Sedat 1983:340). All of the adzes at Zacualpa were green or gray-green (Wauchope 1975:41). Jade adzes were reported in the Nebaj region (Becquelin et al. 2003:195, the largest of which had a length of about 6.5 cm. Ichon (1982:173) reported a serpentine adze at Los Encuentros that was 5.5 cm long, 3 cm wide, and 1.4 cm thick at its base. Jade adzes are common at Kaminaljuyu (Kidder

et al. 1946:142), the longest of which is 8.8 cm long. At Copan (Willey et al. 1994:248), the examples range from very large (over 15 cm) to under 6.5 cm long, with the latter being the most common.

### Bead

**Frequency:** 16 examples

**Weight:** 18.7 g

**Description:** There is a strong preference for apple green (75%) color, but white (13%), pink (6%), and grayish green (6%) are present as well. All but one of the examples (94%) is complete. The diameter is 9 mm (6-17 mm) and the length is 9 mm (3-38 mm).

**Intraregional Comparison:** Jade beads, all of which were subspherical in shape, were only found in the Candelaria Caves and La Lima. While apple green was the most common color in both contexts, there was a wider variety of colors in the Candelaria system, including white and pink. Jade beads were common at Cancuen (Kovacevich 2006:174).

**Interregional Comparison:** Subspherical jade beads have been reported at almost every Maya site—Seibal (Willey 1978:97-8), Uaxactun (Kidder 1947:49-50), Piedras Negras (Coe 1959:51), San Pablo Cave (Lee and Hayden 1988:47), Naj Tunich (Brady 1989:294), Los Cerritos Chijoj (Ichon 1992:216), the Salamá Valley (Sharer and Sedat 1983:342), Alta Verapaz (Arnauld 1986:284), Zacualpa (Wauchope 1975:43), the Middle Chixoy Valley (Ichon and Cheesman 1983:42), Kaminaljuyu (Kidder et al. 1946:111), and Copan (Willey *et al.* 1994:254-6).

All of the subspherical jade beads in Alta Verapaz had a diameter of between 2.5 and 3.6 cm, while the 169 examples from the Salamá Valley had a diameter of .7 to 3.3 cm. The 28 reported jade beads at Zacualpa were found in a single Late Classic cache. At Nebaj (Kidder 1951:40-1) and in the surrounding region (Becquelin et al. 2003:194) sub-spherical beads were found and appear to date mostly to the Early Classic. The examples from Kaminaljuyu had a diameter of between .5 and 2.5 cm.

#### Carved Figures

**Frequency:** 6 examples

**Description:** All six were made from a poor quality jade. Three represent marine life (two snails and a turtle), two are human (a face and a hand), and the third is an unknown, abstract object (although it likely has heavenly associations).

**Intraregional Comparison:** This fragment was found in La Lima. The three representations of marine life echo another cache from Tres Islas described below.

#### Waste

**Frequency:** 1 example

**Weight:** 1.2 g

**Description:** The fragment is a dark green.

**Intraregional Comparison:** This fragment was found in La Lima.

**Interregional Comparison:** One piece of raw jadeite was found by Willey et al. (1994:257) at Copan, while Strómsvik (1942) reports several caches with “rough” jade.



## VII. Mosaics

This artifact class normally consists of composite disks or rectangles (absent in the present sample)—a shiny, polished mineral applied on a hard, solid back. The most common examples have mosaics of pyrite tiles fixed atop a slate disk, although hematite, jade, mica, and obsidian are all occasionally used as tiles and the back is occasionally made of ceramic or, presumably, wood.

### Pyrite Mosaic Tile

**Frequency:** 9 examples

**Weight:** 15.4 g

**Description:** These mosaic tiles were divided into three different classes—small, large, and ovaloid. There are 5 small tiles (56%) and their average width is 12 mm (9-16 mm), the average length is 17 mm (11-23 mm), and the average thickness is 3 mm (2-4).

3 of the examples (33%) were large, and their average width is 21 mm (18-23 mm) and the average length is 26 mm (18-23 mm). All pieces had a thickness of 4 mm. Only one of the examples is ovoid (11%), and is 10 x 13 mm and 3 mm thick.

**Interregional Comparison:** If mosaic tiles appear independently of mirrors, they are normally reported as such, with the exception of Piedras Negras, where an unspecified number was reported (Coe 1959:423). For a summary of the presence of pyrite mirrors in the Maya world see the description for the slate mirror back below.

### Mica Mosaic Tile

**Frequency:** 2 examples

**Weight:** 5 g

**Description:** Both of these examples were fragments 5 mm thick.

**Intraregional Comparison:** Both come from the same lot in a cave in the up-river part of the Candelaria system.

**Interregional Comparison:** Mica might have been used in mosaics at Kaminaljuyu (Kidder et al. 1946:144).

#### Hematite Mosaic Tile

**Frequency:** 1 example

**Weight:** .2 g

**Description:** This piece is just a small fragment that was 1 mm thick.

**Intraregional Comparison:** This piece as well as an unworked piece of hematite was found in La Lima.

**Interregional Comparison:** Hematite was used at Piedras Negras (Coe 1959:43), potentially for mosaics.

#### Slate Mirror Back

**Frequency:** 1 example

**Weight:** 57.6 g

**Description:** This piece was broken, but a drilled hole was present on the piece, most likely for securing it to ceremonial regalia.

**Intraregional Comparison:** This piece (and another that was noted during reconnaissance work) came from a cave in the Candelaria system. Several were found at

Cancuen, normally made from ceramic or slate with two drilled holes (Kovacevich 2006:231).

***Interregional Comparison:*** Mirror backs are common in the Maya world, and they are normally made of slate, although ceramic, mudstone, and (perhaps) wood were all common alternatives.

At Seibal, a slate example with a 10 cm diameter was found (Willey 1978:96) without evidence of drilled holes. While 1 standard pyrite mosaic mirror was reported at Piedras Negras (Coe 1959:42), excavations also revealed 2 solid, unperforated plaques made of single, large pieces of pyrite. No mosaics were identified at Uaxactun, although a ceramic plaque back was reported (Kidder 1947:69). 2 fragments of likely slate mirror backs were found at Naj Tunich (Brady 1989:308-9).

At a cave in Quen Santo there was a broken slate back 8.8 cm. in diameter (Seler 2003, fig. 224). Two mirror backs were identified at Asunción Mita with a 4.5 cm diameter (Bond 1989:98). 15 were found in the Salamá Valley made of slate, siltstone, sandstone, or schist with a diameter of 7.9-12.2 cm and a thickness of .3 to .9 cm (Sharer and Sedat 1983:340). At Zacualpa (Wauchope 1975:41), a pottery mirror-back with two drilled holes was found. At Copan (Willey et al. 1994:251-2), 7 or 8 mirror backs were found and were made of slate or mudstone.

By far the largest assemblage of mirrors was found at Nebaj (Kidder 1951:44-50, Becquelin et al. 2003:194)—212 examples dating to between the Early Classic and the Early Postclassic. The backs, most commonly made of slate, were often made in two pieces with a tight bevel allowing them to be put together. Jade mosaic “mirrors” are also common there on either a shell or ceramic back, and one example is a jade and

obsidian composite (Kidder 1951:1-2). In the Middle Motagua Valley, mirror backs were found at four sites surveyed by Ichon—one-holed backs with an 8-16 diameter at Los Encuentros (Ichon 1982:179-80), San Juan las Vegas (Ichon and Cheesman 1983:44), Chirramos (Ibid. 86), and Chitomax 1 (Ibid. 128). All appear to have been made from slate and the disk from Chirramos had 2 drilled holes.

Mosaics were found in almost every tomb at Kaminaljuyu excavated by Kidder et al. (1946:115). Pyrite plaques were reported by Kidder et al. (1946:126) at Kaminaljuyu with diameters ranging between 7.5 and 25 cm in diameter. They tended to be .5 cm thick and were often made from flake. Unlike the examples from other regions, some of the mirrors and mosaics here were very complex.

### **VIII. Quartz**

With the exception of the “polishers,” all of the examples of quartz present in the region are well-worn pebbles that were likely transported into the region along rivers. The polishers were long sheets of crystals, sort of a naturally-occurring sandpaper, and were likely imported from a place of origin. In addition to the tools described below, quartz was very commonly used as a temper in the production of ceramics throughout the whole period of occupation of the region.

Since these pebbles were one of the most frequent naturally-occurring materials found during excavations and reconnaissance, they were not always collected.

The quartz color appears to have been distributed consistently throughout the region. In order of importance, the colors are white (60%), pink (17%), gray (14%), yellow (7%), tan (1%), red (1%), and transparent (less than 1%).

Instead of performing exact measurements, basic size categories were used based on the length of the longest size—small (less than 1 cm), medium (1-5 cm), large (5-10 cm), and very large (over 10 cm).

### Unused Quartz

**Frequency:** 537 examples (74% of the sample)

**Weight:** 12,236 g

**Description:** These nodules could have been unintentionally deposited but were still recorded. They are most commonly medium-sized (48%), although they range from small (26%) to very large (2%).

**Intraregional Comparison:** A small part of the sample (3%) was found in the Candelaria cave system, and an even smaller amount (1%) was found in La Caoba Vieja, but the lion's share (96%) was found in La Lima.

**Interregional Comparison:** Unworked quartz has been intentionally cached at several sites in the Maya world. 5 pieces were recovered in a cache in Alta Verapaz (Arnauld 1986:290). Probable quartz pebbles were reported at Nebaj (Kidder 1951:51) that were cached in 6 incensarios and 1 bowl. Kidder (Ibid., Kidder et al. 1946:144) also reports that they were found in tombs at Kaminaljuyu; and Ichon and Cheesman (1983:42) found several quartz pebbles in a Late Classic tomb at San Juan las Vegas in the Middle Motagua Valley. William Coe (1959:53) also mentions an unidentified "crystalline stone" recovered from a cache at Piedras Negras that is most likely quartz, as is the "rock crystal" (Kidder 1947:52) from an Early Classic burial at Uaxactun. In Alta Verapaz, Arnauld (1986:286) reported several beads made from quartz.

### Quartz Flake

**Frequency:** 92 examples (13 % of the sample)

**Weight:** 4,326.2 g

**Description:** This category primarily includes quartz that was broken in antiquity, although many of the pieces were likely shattered in excavation, through natural processes, or in transit to the capital. The sample includes flakes of all size classes, although they are most commonly medium (52%), large (25%), or small (17%). It is unclear how many (if any) of these pieces were refuse from some sort of manufacture and how many are just broken rocks.

**Intraregional Comparison:** This is the only type of quartz artifact that is more common outside of La Lima. It is present at La Caoba Vieja (46%), La Lima (38%), and in the Candelaria Caves (16%).

**Interregional Comparison:** No quartz flakes have been reported at other sites.

### Quartz Pecker

**Frequency:** 55 examples (8% of the sample)

**Weight:** 6,263,7 g

**Description:** These were simply pieces of quartz that have evidence of percussive wear on one or more sides. They are normally large (51%), although they are somewhat variable in size (98% of the sample are between medium and very large).

**Intraregional Comparison:** All but one of the examples was found in La Lima; the exception is from La Caoba Vieja.

**Interregional Comparison:** No quartz peckers have been reported at other sites.

### Quartz Polisher

**Frequency:** 31 examples (4% of the sample)

**Weight:** 1,873.9 g

**Description:** These were large blocks of quartz composed of multiple crystals (much like the interior of a geode) that are well-worn. It is likely that these were used to polish the groundstone hand-axes at the site.

**Intraregional Comparison:** With the exception of one found in a nearby cave, every polisher came from La Lima.

**Interregional Comparison:** No quartz polishers have been reported at other sites.

### Quartz Chopper

**Frequency:** 6 examples (3% of the sample)

**Weight:** 749.2 g

**Description:** These are large (83%) to very large (17%) pieces of quartz in which a simple bifacial edge has been knapped to enable them to be used as simple chopping tools.

**Intraregional Comparison:** All of the choppers were found at La Lima.

**Interregional Comparison:** Several quartz choppers were found at the San Pablo Cave (Lee and Hayden 1988:58).

### Quartz Scraper

**Frequency:** 4 examples (1% of the sample)

**Weight:** 111.9 g

**Description:** These are pieces of quartz with a sharp edge that were most likely used as simple scrapers. They are either medium (75%) or very large (25%) in size.

**Intraregional Comparison:** All of the scrapers were found at La Lima.

**Interregional Comparison:** One quartz crystal with obvious wear from grinding was reported at Seibal (Willey 1978:94).

## **IX. Other Lithic Artifacts**

### Unworked Red Metamorphic Rock

**Frequency:** 16 examples

**Weight:** 684.5 g

**Description:** While these rocks have no evidence of use nor are there any worked objects made from this rock, they do not appear to have been native to the region and so were collected and described here. The rocks are widely variant in size.

**Intraregional Comparison:** All examples are from La Lima.

### Unworked Pumice Lump

**Frequency:** 11 examples

**Weight:** 409.8 g

**Description:** These were likely remnants of pumice that was ground and used as temper in many of the ceramics from La Lima, where the majority were found.

**Intraregional Comparison:** One example comes from a cave in the up-river part of the Candelaria system, the rest are from La Lima.



***Interregional Comparison:*** Two pieces of pumice were reported at Los Encuentros (Ichon 1982:173-5) that had been worked into a metate or ring form.

#### Unworked Sandstone

***Frequency:*** 10 examples

***Weight:*** 1537.4 g

***Description:*** These pieces do not appear to have been modified, but might have been associated with the production of poorly-made local groundstone tools such as manos and metates. These examples are either small (3 x 10 x 4 mm), medium (28 x 53 x 22 mm), or large (79 x 92 x 79 mm) in size.

***Intraregional Comparison:*** The medium-sized piece was found at La Caoba Vieja; the rest of the rocks are from La Lima.

***Interregional Comparison:*** While certainly present at many sites in the Maya world, unworked sandstone has not specifically been mentioned in any of the reports.

#### Pyrite Waste

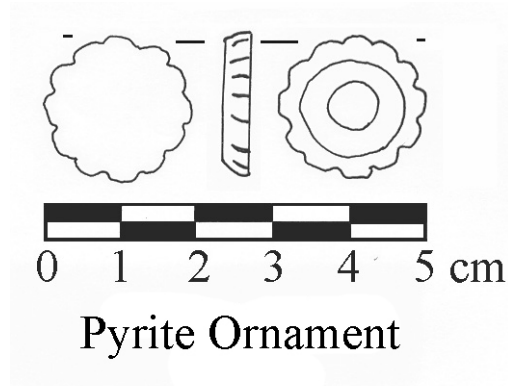
***Frequency:*** 2 examples

***Weight:*** 15.9 g

***Description:*** Both of the pieces had some evidence of processing and the complete piece had a width of 22 mm, length of 26 mm, and thickness of 18 mm.

***Intraregional Comparison:*** Both of these fragments came from La Lima. Cancuen has a lot of pyrite in various stages of production (Kovacevich 2006).

**Interregional Comparison:** In addition to mirrors, pyrite was occasionally used for other things. At Uaxactun, for example, Kidder (1947:52) reported several pyrite beads.



**Figure A- 11: Pyrite Earflare**

Pyrite Earflare (figure A-11)

**Frequency:** 2 examples

**Weight:**

**Description:** Both of these examples were small, polished pyrite disks. One was round and the other was foliated.

**Intraregional Comparison:** Both of these examples come from La Lima.

**Interregional Comparison:** While earflares are common in the Maya world, no recorded examples were made from pyrite.

Bead

**Frequency:** 2 examples

**Weight:** 1.2 g

**Description:** The stone used to make these beads were unidentified. One is fragmentary but appears to have had a diameter of 12 mm and a length of 6 mm; the other, complete bead has a diameter of 12 mm and a length of 7 mm.

**Intraregional Comparison:** While they are both roughly the same size and the same material, one was found in a cave in the up-river part of the Candelaria system, while the other was found at La Lima, which is located at the down-river extreme of the system.

**Interregional Comparison:** Beads are common at every site in the Maya world, and while they are often made of jade or similar stones, this is not exclusively the case.

#### Unworked Hematite

**Frequency:** 1 example

**Weight:** .1 g

**Description:** This small piece had no evidence of working, but was probably brought in with other pieces to make mosaic tiles.

**Intraregional Comparison:** This piece as well as the worked hematite tile (see above) was found in La Lima.

**Interregional Comparison:** Three pieces of unworked hematite were recorded at Piedras Negras (Coe 1959:43).

#### Unworked Mica

**Frequency:** 1 example

**Weight:** 2.7 g

**Description:** This piece of mica was unused, but was potentially intended to become part of a mosaic.

**Intraregional Comparison:** The piece was deposited in a cave in the Candelaria system. The mica mosaic tiles (see above) were found 6 km down-river in the same cave.

**Interregional Comparison:** Mica has been found at Kaminaljuyu (Kidder et al. 1946:144), where it was used for “some ornamental purpose.” In the Salamá Valley (Sharer and Sedat 1987:343), one piece of mica was fashioned into an earflare.

#### Polished “Stick”

**Frequency:** 1 example

**Weight:** 27.7 g

**Description:** This was likely an artifact and not a naturally-produced object. It was 21 mm wide, 78 mm long, and 12 mm thick with a smooth, polished, red surface. It is possible that it was a pestle with no evidence of use-wear.

**Intraregional Comparison:** This was found in La Lima.

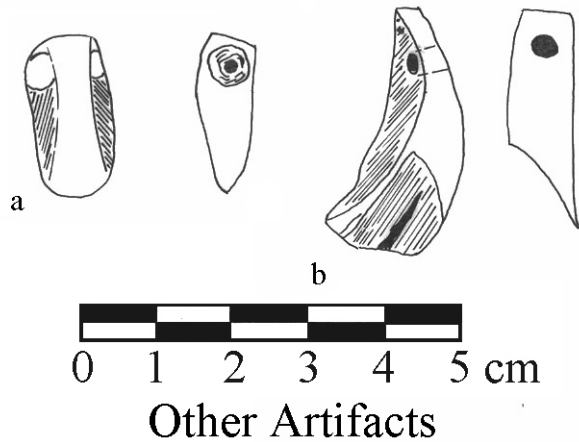
**Interregional Comparison:** No similar pieces have been recorded at other sites in the Maya world.

#### White Pendant (figure A-12 a)

**Frequency:** 1 example

**Weight:** 4.2 g

**Description:** This polished white stone is a fragment of a long, curved pendant.



**Figure A- 12: Other artifacts, a) basalt pendant, b) white pendant**

***Intraregional Comparison:*** This was found in a cave in the Candelaria system near La Lima.

***Interregional Comparison:*** A pendant with a similar form (although made of limestone) was reported at Seibal (Willey 1978:99). It has drilled holes just below its squared edges and is 5.2 cm long and is squared in profile.

**Basalt Pendant** (figure A-12 b)

***Frequency:*** 1 example

***Weight:*** 2.4 g

***Description:*** This was a small part of a grayish pendant.

***Intraregional Comparison:*** This fragment was found in the up-river part of the Candelaria Cave system.

***Interregional Comparison:*** No basalt pendants have been found at other sites in the Maya world.

### Meteoritic Iron Ore

**Description:** The only place where this material has been found is a single midden in La Caoba Vieja. Braswell (pers. comm. 2006) suggested that they might have been used to collect iron oxide for pigments.

**Interregional Comparison:** The only other site where meteoritic iron has been identified is Seibal (Willey 1978:95), although they were chondritic (spheroid) instead of squared. Some had evidence that they were used for pounding, but most were unutilized.

## **X. Faunal Material**

A very preliminary examination of the modified bone and shell was undertaken by Woodfill under consultation with Erin Thornton, who will undertake a more complete analysis of all of the faunal material from the caves and peripheral settlements in the near future. There does appear to be, however, a wide variety of faunal material present at the site, with local species (most commonly deer, jute, tapir, peccary, and armadillo) alongside exotic remains (sea turtle and marine shell).

Of all of the shell artifacts recovered, only the jutes, the marine cache, and the freshwater clam were from settlements, while the rest came from caves in the Candelaria system or the San Francisco Hills.

### Shell and Coral Cache

**Frequency:** 6 examples

**Weight:**

**Description:** These marine shells and pieces of coral were found together in a single cache. .

***Intraregional Comparison:*** These came from a stela cache in Tres Islas.

***Interregional Comparison:*** Stromsvic (1942) reported several similar caches at Copan and Quirigua. This is a rather common pattern in the Maya world, however, as real or imitation marine and freshwater animals appear to have been used to associate monuments and buildings with the watery realm or the Underworld.

### Oliva Tinklers

***Frequency:*** 3 examples

***Weight:*** 13.2 g

***Description:*** Oliva is a Pacific shell that was often imported into the Maya lowlands to create “tinklers,” which are grouped together and worn on ceremonial regalia to serve as both visual and aural decoration. The shells were modified by drilling a hole near each end and cutting a line perpendicular to the length at around the mid-section. All three of the shells were fairly standard in size, with an average width of 17 mm (16-18 mm) and an average length of 35 mm (34-36 mm). All of the examples were 15 mm thick.

***Intraregional Comparison:*** These were found on two opposite ends of the Candelaria Cave system.

***Interregional Comparison:*** Tinklers and other parts of the ceremonial regalia appear to have been intentionally discarded or cached in ceremonial areas throughout the Maya world (Brady, pers. comm. 2006).

Five unfinished or fragmentary oliva tinklers were identified at Seibal (Willey 1978:162) and appear to date to Bayal contexts. At Piedras Negras 5 were recovered with drilled holes at the top and bottom, while the 9 from Uaxactun (Kidder 1947:63-4)

had either a hole or a transverse cut. The tinklers there spanned the whole occupation history of the site (Late Middle Preclassic to Late Classic), and several still had the spire present. Two tinklers were found at Naj Tunich (Brady 1989:286), one with a drilled hole and another sawed.

Tinklers are more commonly reported in the highlands—12 were reported at Nebaj (Kidder 1951:56), with 8 coming from a single cache. Most appear to have one drill-hole. The other 4 date to the Postclassic, as they were found with copper bells. These have sawed perforations on one side. An unspecified number of oliva shells were reported in the Nebaj region (Becquelin et al. 2003:194), and it is unclear if they were worked. The largest reported collection in the Maya world is at Kaminaljuyu, where multiple caches containing anywhere from two to several hundred tinklers were found (Kidder et al. 1946:147-8). Although some of them have evidence of sawing; it is likely that all were drilled, even though this was not specified. A single tinkler was reported by Willey et al. at Copan (1994:294).

#### Modified and Unmodified Saltwater Clam

***Frequency:*** 3 examples

***Weight:*** 2.8 g

***Description:*** Of the three examples, one was a fragment, another was a fragment with a circular incision, and the third was a carved shell gorget with a carved skull face on one side with drilled hole eyes. The gorget has a diameter of 21 mm and a thickness of 12 mm.



***Intraregional Comparison:*** All three examples were found in caves—the gorget in the San Francisco Hills and the others from the Candelaria system.

***Interregional Comparison:*** Perforated shell disks were reported at Piedras Negras with a 1.2 cm diameter (Coe 1959:58) and several discoidals made of spondylus were also recovered (Ibid. 57).

#### Mix of Snails, Bivalves, and Crab Claws

***Weight:*** 13,172 g

***Description:*** These shells appear to have been collected and deposited *en masse* in order to create watery symbolism. None of the jutes appear to have been intentionally broken (so they most likely were not eaten), and the absence of any part of the crabs beyond the claws could be the result of decomposition—claws are the thickest part of the exoskeleton and are often the only part preserved in archaeological contexts (Thornton, pers. comm. 2005).

***Intraregional Comparison:*** This mix is consistently found in areas that served as ritual stages and is present in and near cave entrances in the Candelaria system. It is not present in any other site.

***Interregional Comparison:*** A similar mix but missing crab claws was reported at the San Pablo Cave (Lee and Hayden 1988:47). Caching of shells is fairly common in the Maya world, however, and is described in more detail above.

#### Bone Awl

***Frequency:*** 2 examples

***Interregional Comparison:*** Bone awls have been found at Seibal (Willey 1978:168), Tikal (Moholy-Nagy 2003:59), Uaxactun (Kidder 1947:54), Kaminaljuyu (Kidder et al. 1946:153), and Copan (Willey et al. 1994:291).

Bone needles are also common, and have been reported in the Nebaj area (Becquelin et al. 2003:126) and Copan (Willey *et al.* 1994:291).

### Bone Tube

***Frequency:*** 1 example

***Interregional Comparison:*** Bone tubes have been found at Seibal (Willey 1978:169) with a very smoothed or polished surface and a diameter of 1.2-2.5 cm. All 5 appear to date to the Bayal phase. Two have also been reported in the Nebaj region (Becquelin et al. 2003:273). Several bone tubes with one finely-cut end and a well-polished surface were found at Naj Tunich (Brady 1989:275-7).

### Tortoise Shell

***Frequency:*** 1 fragmentary example

***Description:*** This fragment had 1 drilled hole present. The species was determined by Erin Thornton (pers. comm. 2006) to be Central American river turtle (*Demetemies mawaii*).

***Intraregional Comparison:*** The only example was found in the Candelaria Caves near the site of La Lima.

***Interregional Comparison:*** A tortoise shell with two drilled holes was identified at Seibal (Willey 1978:171). Seven un-modified tortoise shells were found in tombs at

Kaminaljuyu (Kidder et al. 1946:156). 2 partial shells were recovered at Naj Tunich (Brady 1989:279; one of the examples had a drill-hole. A disk made of the material with carved glyphs was reported by Kidder (1947:59) at Uaxactun.

## **XI. Human Bone**

The human bone has been preliminarily analyzed by Monterroso, who will do a full analysis in the near future. There were a surprising number of infant skeletons in the cave assemblages, and human bones appear to have been scattered (and often burnt) in the caves. There were 3 burials that were excavated, although many more were recorded during cave reconnaissance.

## **XII. Vegetal Remains**

A more detailed study is being conducted by Duncan Cook and a report is forthcoming. The primary vegetal remains present in the region come from the Candelaria Caves and consist of copal and burnt corn cobs.

Copal was sometimes found molded into figurines or ear-flares at Nebaj (Kidder 1951:58) and Kaminaljuyu (Kidder et al. 1946:102). Raw nodules have been reported at Piedras Negras (Coe 1959:74) and were recently found in a cave in the Mirador Basin (C. Morales, pers. comm. 2004).

Burnt corn has been found in several caves in Belize (Awe, pers. comm. 2003), where it is presumed to have been associated with harvest ceremonies. The samples there as here are immature.

### **XIII. Clay Artifacts**

While clay was used primarily to make vessels, it was also used in the construction of houses and to make figurines. Several of the sherds were also modified and served an as-of-yet-unclear secondary function.

#### Burnt Clay

**Weight:** 20,414 g

**Description:** Large pieces of burnt clay, most of which appears to have been the daub used to make house walls.

**Intraregional Comparison:** Over 99.8% of the total weight comes from middens and structure fill in La Lima, although a very small amount was found in a nearby cave and in a midden in La Caoba Vieja.

**Interregional Comparison:** Bond (1989:93) reported Preclassic remnants of wattle-and-daub structures in Jutiapa.

#### Ceramic Pendant

**Frequency:** 4 examples

**Description:** These pendants appear to have been molded to resemble human phalanges and strung together into necklaces.

**Intraregional Comparison:** Similar pendants were found at Cancuen (Sears, pers. comm. 2002) and Raxruha Viejo (pers. obs. 2002).

**Interregional Comparison:** While ceramic pendants have been reported at other sites (e.g., Willey et al. 1994), this specific form appears to be unique to the region.

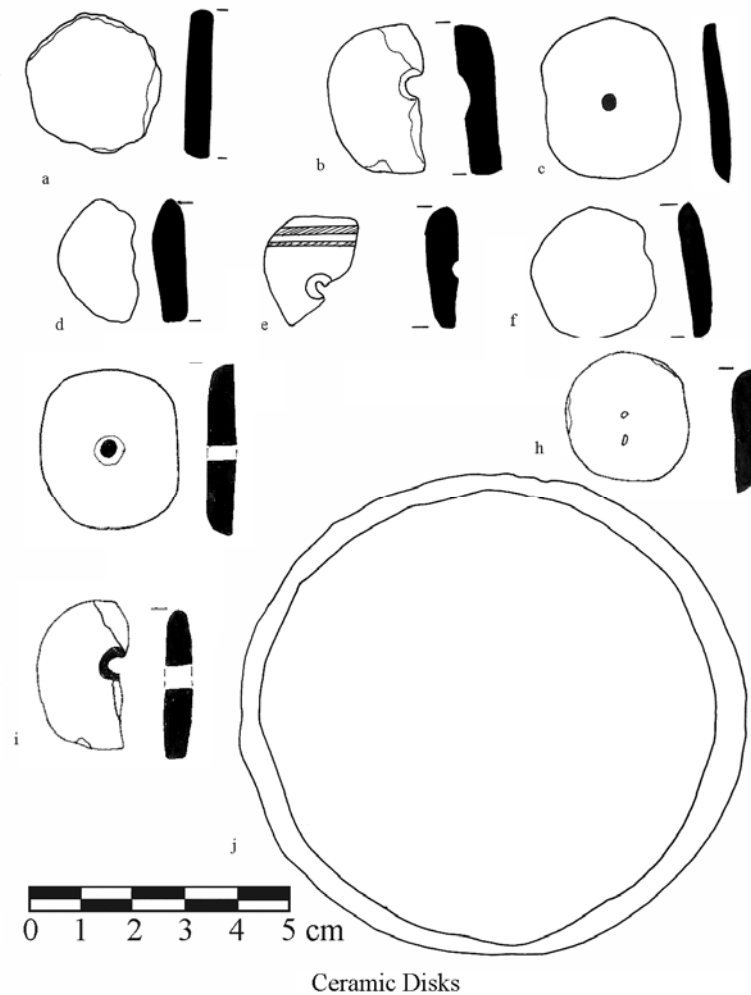
Ceramic Disks (figure A-13, *a, d, f, j*)

**Frequency:** 5 examples

**Intraregional Comparison:** Ceramic disks were found in the Candelaria Caves and the San Francisco Hills.

**Interregional Comparison:** Ceramic disks are present at many lowland sites. At Seibal, Willey (1978:40-1) reported 43 with trimmed or rough edges spanning the entire occupation at the site with diameters ranging between 3 and 13 cm. 139 were identified at Tikal (Moholy-Nagy 2003:78), over half of which date to Imix. The diameter ranges from 1.8-15.4 cm, and one was used as a pot lid in a Late Preclassic burial. At Piedras Negras (Coe 1959:70), 8 disks were found with a diameter of between 2.6 and 6.1 cm. “Many” were found at Uaxactun (Kidder 1947:68), and a single example was found at Naj Tunich (Brady 1989:265). Laporte and Mejía (2005:260) photographed several from Ixkun.

In the highlands, ceramic disks are also common. They were found in several caches in Chacula being used as lids (Seler 2003, fig. 16) or alone (Ibid. 94). In Jutiapa, 2 Preclassic disks with a diameter of 2 and 3 cm and one Late Classic example were reported by Bond (1989:93-4). At Copan, Willey et al. (1994:207-8) reported 47, 15 of which had a diameter of over 6.5 cm, although the majority were between 4 and 6 cm in diameter. The majority was made of coarse pottery types and had both well-done and rough edges. Another disk from Copan was reported by Strómsvik (1942:68) cached under a stela.



**Figure A- 13: Ceramic Disks, a, d, f, j) unmodified disks; b-c, e, g-i) perforated disks**

Perforated Ceramic Disks (figure A-13, b-c, e, g-i)

**Frequency:** 6 examples

**Description:** Same as above, although with the addition of a drilled hole in the center of the disk.

**Intraregional Comparison:** Same as above.

During her survey of the Candelaria Caves, Carot (1987:60) recovered 2 perforated bone disks.

***Interregional Comparison:*** Perforated ceramic disks are very common in the Maya world, where they are normally referred to as spindle whorls, although Moholy-Nagy (2003:77) believes them to be counters, tokens, or game pieces. At Seibal, Willey (1978:41-4) reported 78 dating to the Preclassic through Bayal, when they are most common. The smallest disks have a 3 cm diameter, but some of the fragments appear to be from much larger examples. At Tikal, 287 were reported (Moholy-Nagy 2003:76-7) dating to all periods of occupation. The diameter ranges from 1.7-6.3 cm. The 3 examples from Piedras Negras (Coe 1959:69) were of an unspecified size. At Uaxactun (Kidder 1947:67), 39 were found with diameters ranging between 2.5 and 8.5 cm. 3 were recovered at Naj Tunich, all with rough edges (Brady 1989:264). Laporte and Mejía (2005:260-1) photographed several from Ixkun.

One perforated Late Classic ceramic disk was reported in the collection from Asunción Mita, Jutiapa, by Bond (1989:93-4). 30 were also reported by Willey *et al.* (1994:205) at Copan.

#### Modeled Ceramic Disk and Ring

***Frequency:*** 1 example each

***Description:*** Unlike the other disks, these were specially made as disks. They have the same diameter, and the ring is under 1 cm thick.

***Intraregional Comparison:*** Both of these disks were recovered in the same lot in a midden in La Caoba Vieja and are roughly the same size, although one is a solid disk and the other is a thin ring.

***Interregional Comparison:*** Modeled disks and rings were found from the Terminal Preclassic to the Terminal Classic at Tikal (Moholy-Nagy 2003:83). Another fragment with a 12 cm diameter was reported in Jutiapa dating to the Preclassic (Bond 1989:94-5).

### *Figurines*

The figurines are being analyzed as part of a regional study by Erin Sears, and information about the figurines will be forthcoming in her doctoral dissertation.

## **XIV. Bibliography**

Aldenderfer, Mark

- 1991 The Structure of Late Classic Lithic Assemblages in the Central Petén Lakes Region, Guatemala. *In* Maya Stone Tools: Selected Papers from the Second Maya Lithic Conference. Monographs in World Archaeology No. 1. Thomas Hester and Harry Shafer, eds. Pp. 119-141. Madison: Prehistory Press.

Arnauld, Marie Charlotte

- 1986 Archéologie de l'Habitat en Alta Verapaz (Guatemala). Collection Etudes Mésoaméricaines 10. Paris: Centre D'Études Mexicaines et Centraméricaines.

Becquelin, Pierre; Alain Breton; and Véronique Gervais

- 2001 Arqueología de la región de Nebaj, Guatemala. Cuadernos de estudios Guatemaltecos No. 5. Mexico City: Centre D'Études Mexicaines et Centraméricaines.

Bond, Margaret

- 1989 Artifacts. *In* Archaeological Investigations in the Department of Jutiapa, Guatemala, by Robert Wauchope and Margaret Bond. Middle American Research Institute Publication 55. Pp. 85-100. New Orleans: Tulane University Press.

Brady, James

- 1989 An Investigation of Maya Ritual Cave Use with Special Reference to Naj Tunich, Petén, Guatemala. PhD dissertation, Department of Anthropology, University of California, Los Angeles.



- Carot, Patricia  
1987 Archeologie des grottes du nord de l'Alta Verapaz. MA thesis, Department of Archaeology, Université Paris I.  
1989 Arqueología de las cuevas del norte de Alta Verapaz. Cuadernos de Estudios Guatemaltecos I. Mexico City: Centre d'Études Mexicaines et Centroaméricaines.
- Coe, William  
1959 Piedras Negras Archaeology: Artifacts, Caches, and Burials. Philadelphia: University of Pennsylvania Press.
- Demarest, Arthur and Andrea Putscher  
1986 Appendix 3: Ground Stone Artifacts of Santa Leticia. *In* The Archaeology of Santa Leticia and the Rise of Maya Civilization. Pp. 201-9. Middle American Research Institute, Publication 52. New Orleans: Tulane University Press.
- Ford, Derek and Paul Williams  
1989 Karst Geomorphology and Hydrology. London: Chapman and Hall Publishing.
- Fowler, William  
1987 Analysis of the Chipped Stone Artifacts of El Mirador, Guatemala. Notes of the New World Archaeological Foundation, no. 5. Provo: Brigham Young University Press.
- Graham, John; Thomas Hester; and Robert Jack  
1982 Sources for the Obsidian at the Ruins of Seibal, Petén, Guatemala. *In* Studies in the Archaeology of Mexico and Guatemala, edited by John Graham. Pp. 111-22. Contributions of the University of California Archaeological Research Facility No. 16. Berkeley: University of California Archaeological Research Facility.
- Harbottle, Garman; Hector Neff; and Ronald Bishop  
1994 The Sources of Copan Valley Obsidian. *In* Ceramics and Artifacts from Excavations in the Copan Residential Zone. Gordon Willey, Richard Leventhal, Arthur Demarest, and William Fash, Jr. Pp. 445-57. Papers of the Peabody Museum of Archaeology and Ethnology Vol 80. Cambridge: Harvard University Press.
- Harlow, George  
1993 Middle American Jade: Geologic and Petrologic Perspectives on Variability and Source. *In* Precolumbian Jade: New Geological and Cultural Interpretations. Pp. 9-29. Salt Lake City: University of Utah Press.

- Ichon, Alain  
 1982 Archéologie de sauvetage dans la vallée du Río Chixoy, vol. 4: Los Encuentros. Paris: Centre National de la Recherche Scientifique.  
 1992 Los Cerritos-Chijoj: La transición epiclásica en las Tierras Altas de Guatemala. Guatemala: Centre D'Études Mexicaines et Centraméricaines.
- Ichon, Alain and Rita Cheesman  
 1983 Archéologie de sauvetage 5: Les sites classiques de la Vallée Moyenne du Chixoy. Paris : Institut d'Ethnologie.
- Kidder, Alfred  
 1947 The Artifacts of Uaxactun, Guatemala. Carnegie Institution of Washington Publication 576. Washington, D.C.: Carnegie Institution of Washington.  
 1951 Artifacts. *In* Excavations at Nebaj, Guatemala. Carnegie Institution of Washington Publication 594. Washington, D.C.: Carnegie Institution of Washington.
- Kidder, Alfred; Jesse Jennings; and Edwin Shook  
 1946 Excavations at Kaminaljuyu. Carnegie Institution of Washington Publication 561. Washington, D.C.: Carnegie Institution of Washington.
- Klein, Cornelis and Cornelius Hurlbut  
 1977 Manual of Minerology, Twentieth Edition. New York: John Wiley and Sons.
- Kovacevich, Brigitte  
 2006 Reconstructing Classic Maya Economic Systems: Production and Exchange at Cancuen, Guatemala. Ph.D. dissertation, Department of Anthropology, Vanderbilt University.
- Lang, Frederick  
 1993 Introduction. *In* Precolumbian Jade: New Geological and Cultural Interpretations. Pp. 1-6. Salt Lake City: University of Utah Press.
- Laporte, Juan Pedro and Héctor Mejía  
 2005 Ixkun, Petén, Guatemala: Exploraciones en una Ciudad del Alto Mopán 1985-2005. Dolores, Petén, Guatemala: Atlas Arqueológico de Guatemala.
- Lee, Thomas and Brian Hayden  
 1988 San Pablo Cave and El Cayo on the Usumacinta River, Chiapas, Mexico. Papers of the New World Archaeological Foundation No. 53. Provo: Brigham Young University Press.

- Moholy-Nagy, Hattula  
 2003 The Artifacts of Tikal: Utilitarian Artifacts and Unworked Material. Tikal Report No. 27, Part B. Philadelphia: University of Pennsylvania Museum.
- Nelson, Fred  
 1989 Rutas de intercambio de obsidiana en el norte de la península de Yucatán. *In* La obsidiana en Mesoamérica. Margarita Gaxiola and John Clark, eds. Pp. 363-8. Mexico City: Instituto Nacional de Antropología e Historia
- Roemer, Erwin  
 1991 A Late Classic Workshop at Colha, Belize. *In* Maya Stone Tools: Selected Papers from the Second Maya Lithic Conference. Thomas Hester and Harry Shafer, eds. Pp. 55-66. Monographs in World Archaeology No. 1. Madison: Prehistory Press.
- Sharer, Robert and David Sedat  
 1987 Archaeological Investigations in the Northern Maya Highlands, Guatemala: Interaction and the Development of Maya Civilization. University Museum Monograph 59. Philadelphia: University of Pennsylvania Press.
- Seler, Eduard  
 2003 The Ancient Settlements of Chacula in the Nentón District of the department of Huehuetengango, Republic of Guatemala. John Weeks, ed. Lancaster, CA: Labyrinthos.
- Smith, Alfred and Albert Kidder  
 1943 Explorations in the Motagua Valley, Guatemala. *In* Contributions to American Anthropology and History, Vol. 8, No. 41. Carnegie Institution of Washington Publication 546. Washington, D.C.: Carnegie Institution of Washington.
- Strómsvik, Gustav  
 1942 Substela Caches and Stela Foundations at Copan and Quirigua. *In* Contributions to American Anthropology and History, Vol. 7, No. 37. Carnegie Institution of Washington Publication 528. Washington, D.C.: Carnegie Institution of Washington.
- Thompson, Marc  
 1991 Flaked Celt Production at Becan, Campeche, Mexico. *In* Maya Stone Tools: Selected Papers from the Second Maya Lithic Conference. Thomas Hester and Harry Shafer, eds. Pp. 143-54. Monographs in World Archaeology No. 1. Madison: Prehistory Press.

Valdez, Fred Jr.

- 1986 Appendix 4, The Santa Leticia Obsidian Assemblage: Form, Technology, and Use Wear. *In* The Archaeology of Santa Leticia and the Rise of Maya Civilization. Pp. 210-6. Middle American Research Institute, Publication 52. New Orleans: Tulane University Press.
- 1994 Chipped Stone (Obsidian). *In* Ceramics and Artifacts from Excavations in the Copan Residential Zone. Gordon Willey, Richard Leventhal, Arthur Demarest, and William Fash, Jr. Pp. 273-90. Papers of the Peabody Museum of Archaeology and Ethnology Vol 80. Cambridge: Harvard University Press.

Valdez, Fred Jr. and Daniel Potter

- 1991 Chert Debitage from the Harvard Copan Excavations: Descriptions and Comments. *In* Maya Stone Tools: Selected Papers from the Second Maya Lithic Conference. Thomas Hester and Harry Shafer, eds. Pp. 203-6. Monographs in World Archaeology No. 1. Madison: Prehistory Press.

Wauchope, Robert

- 1975 Zacualpa, El Quiche, Guatemala: An Ancient Provincial Center of the Highland Maya. Middle American Research Institute, Publication 39. New Orleans: Tulane University Press.

Willey, Gordon

- 1972 Artifacts of Altar de Sacrificios. Papers of the Peabody Museum of Archaeology and Ethnography No. 64(1). Cambridge: Harvard University Press.
- 1978 Artifacts. *In* Excavations at Seibal, Department of Petén, Guatemala no. 1. Memoirs of the Peabody Museum of Archaeology and Ethnology vol. 14, no. 1. Cambridge, Harvard University Press.

Willey, Gordon; Richard Leventhal; Arthur Demarest; and William Fash

- 1994 Ceramics and Artifacts from Excavations in the Copan Residential Zone. Papers of the Peabody Museum of Archaeology and Ethnology, Volume 80. Cambridge: Harvard University Press.

Woodbury, Richard and Aubrey Trik

- 1953 The Ruins of Zaculeu, Guatemala. New York: United Fruit Company.

## APPENDIX B:

### DESIGNATED WARES IN THE CERAMIC ANALYSIS

A total of 13 wares were identified in the present sample, all of which are described below. Seven of these wares are defined here using a combination of paste, form, slip, and decoration as identifying features.

#### Río Pasión Slipped Ware

**Groups Present:** Juventud

**Frequency:** 2 sherds

**Established by:** Willey (1970:323-4) in the Lower Pasión

**Surface Treatment:** A red, slightly waxy slip.

**Paste:** Reddish or orangeish with a quartz and sand temper and a thick black nucleus.

**Form:** Thick-walled tecomates with an exteriorly-thickened lip.

**Decoration:** Plain (50%) or champhering (50%)

**Observation:** The sample here appears to be a transition between contemporaneous traditions in the Salamá Valley (Sharer and Sedat 1986) and the Lower Pasión.

**Chronological Distribution:** Oq' (Early Middle Preclassic)

**Geographical Distribution:** This ware is restricted to the Río Pasión (Seibal and Altar), and its presence here is much further south than was originally supposed.

Uaxactun Unslipped Ware

**Groups Present:** Achiotes, Quintal, Cambio, and Delgado

**Frequency:** 12,498 sherds and 2 whole vessels.

**Established by:** RE Smith and Gifford (1966:169) at Uaxactun

**Surface Treatment:** Unslipped but with some effort undertaken to smooth the surface.

Discolorations from firing or use are present in 80.2% of the sample.

**Paste:** The paste is dense and tends towards a reddish or orangeish color. The temper is most commonly quartz (62.3%) or a mixture of calcite and quartz (28.8%), although calcite (6.4%), sand (1.6%), and possibly fine ash (.1%) are all occasionally present.

Over  $\frac{3}{4}$  of the sample has inclusions, which are most commonly black (52.7%) or red (21.6%) ferruginous lumps. Mica (2.6%), pebbles (.7%), charcoal (.3%), and pumice (.1%) are also occasionally present. There is a dark nucleus present in 50.5% of the sample, which is most commonly thick.

**Form:** The most common form is a jar (97.2%), but bowls (1.6%), incensarios (.3), shoe pots (.2%), comales (.1%), cups (less than .1%), sieves (less than .1%), plates (less than .1%), and potentially drums (less than .1%).

**Decoration:** Plain (91.2%), striated (5.3%), washed (2.8%), appliquéd (.3%), impressed (.2%), red-slipped in the interior neck (.2%), incised (less than .1%), fluted (less than .1%), or modeled (less than .1%).

**Observation:** This ware is the only unslipped ware in most of the central lowlands though all time periods, potentially even up to the present day (Castellanos, pers. comm. 2004).

**Chronological Distribution:** Yitoqil (Late Preclassic, .5%), Pel (Early Classic, 84.4%), Jolom (Late Classic, 11.7%)

**Geographical Distribution:** This ware appears throughout the lowlands and is present in the Candelaria cave system and all sites north of it.

#### Paso Caballo Waxy Ware

**Groups Present:** Juventud, Boolay, Pital, Chunhinta, Sierra, Flor, Polvero, Baclam, Boxcay, Caramba, Ixobel, Sibal, Differentiated Color, and Negative Decoration

**Frequency:** 559 sherds and 6 whole or partial vessels

**Established by:** RE Smith and Gifford (1966:167) at Uaxactun

**Surface Treatment:** A waxy slip. During the Early Classic, the slip is often more fragile or less waxy. Discolorations are present in 17.7% of the sample.

**Paste:** The paste is normally reddish or orangeish in color. The temper is most commonly quartz (44.2%) or calcite (19.6%), but is occasionally grog (13.7%), a mixture of calcite and quartz (10.2%), sand (10.2%), volcanic ash (.6%), or an ash and quartz mix (.3%). Inclusions are present in 60% of the sample and are normally black (40.4%) or red (10.8%) ferruginous lumps, but pebbles (3.4%), mica (1.2%), grog (.9%), pumice (.6%), charcoal (.6%), or even a smattering of completely reduced organic elements (.9%). There is a dark nucleus present in 43.6% of the cases, which is often thick.

**Form:** The vessels are most commonly bowls (44.5%) or jars (24.2%), although plates (16.8%), cups (2.9%), mushroom pots (.5%) and shoe pots (.2%) are also present.

**Decoration:** Plain (78.2%), incised (12.7%), dichrome (4.7%), bichrome or polychrome (1.1%), dichrome-incised (.9%), chamfered (.5%), fluted (.5%), resist (.4%) resist-incised (.4%), punctated (.4%), or impressed (.2%).

**Observation:** This ware was originally thought to be exclusively Late Preclassic, but Laporte et al. (1992) have found that it continues through the Early Classic. Since the differences between Late Middle Preclassic and Late Preclassic slipped types are so minimal, Forsyth (1989) used Paso Caballo Waxy for both time periods. I have followed the lead of both Laporte and Forsyth in this study.

**Chronological Distribution:** U Chiha (Late Middle Preclassic, 11%), Yitoqil (Late Preclassic 70.3%), Puj (Terminal Preclassic .7%), and Pel (Early Classic 16.3%)

**Geographical Distribution:** This type appears throughout the Maya lowlands in the Preclassic (although in the Late Middle Preclassic it is often called “Flores Waxy Ware”), and during the Early Classic it is most commonly identified in the southeastern Petén, although more recent projects have found it in sites in Belize, La Joyanca, and Cancuen (pers. obs. 2006). In the present survey, it has been found in small quantities in the Candelaria Caves and is common at all sites north of them.

#### Petén Glossy Ware

**Groups Present:** Ixcanrío, Iberia, Águila, Muqb’ilha’, Dos hermanos, Fama, Pucte, Balanza, Dos Arroyos, Tinaja, Saxche-Palmar, Infierno, Azote, La Isla

**Frequency:** 5432 sherds and 18 whole or partial vessels

**Established by:** RE Smith and Gifford (1966:167) at Uaxactun



**Surface Treatment:** A slip that is normally glossy and sometimes has a cream underslip.

There are discolorations present in 14.4% of the sample

**Paste:** The paste is normally reddish or orangeish and fine or medium in texture. The temper is most commonly quartz (72%), although calcite (15.3%), a calcite and quartz mix (6.8%), and sand (3.3%) are relatively common. Volcanic ash (.9%), quartz and sand mix (.2%), an ash and quartz mix (.1%), or an ash and calcite mix (.1%) are occasionally used as well. There are normally inclusions (79.9% of the cases)—black (53.7%) or red (21%) ferruginous lumps, mica (9%), charcoal (.4%), pebbles (.3%), pumice (.2%) organic elements (.1%), and shell (.1%). There is a dark nucleus present in 38% of the sample that is most commonly thick.

**Form:** The most common form is a jar (54.9%) or bowl (35.4%), although cups (2.1%), plates (1.7%), lids (.1%), and drums (less than .1%) are present as well.

**Decoration:** Plain (78.5%), polychrome (13.3%), polychrome with smudged interior (3.2%), incised (1.2%), smudged interior (1%), bichrome (.7%), fluted (.4%), digital impressed (.3%), impressed (.3%), gouged-incised (.2%), stamped (.1%), chamfered (.1%), and dichrome (.1%). Very rare decorations (composing less than .1% of the sample) include grooving, false resist, modeling, punctated and incised, bichrome and punctated, modeled and incised, plano-relieve, striated, polychrome appliqué, and bichrome appliqué.

**Observation:** R

**Chronological Distribution:** Puj (Terminal Preclassic), Pel (Early Classic), and Jolom (Late Classic)

***Geographical Distribution:*** This ware was found throughout the lowlands and the many of the high-status types were exported to all corners of the Maya world. In the region under study, it appears in the Candelaria Caves and all sites north of them.

Playa Dull Ware

***Groups Present:*** San Martin

***Frequency:*** 24

***Established by:*** Sabloff (1975:30) at Seibal

***Surface Treatment:*** Rough tan slip with dark fire-clouding present in 60% of the sample.

***Paste:*** A very flakey, crumbly, coarse, orange paste with calcite (80%), quartz (10%), or a calcite and quartz mix (10%) for temper. There are often black (50%) or red (20%) ferruginous lump inclusions, and a thick dark nucleus is present in 10% of the sample.

***Form:*** Jars

***Decoration:*** None

***Observation:*** This ware was identified without comparing the present sample to Sabloff's.

***Chronological Distribution:*** Pel (Early Classic)

***Geographical Distribution:*** This ware has only been identified in Seibal and the San Francisco Hills.

Imitation Petén Glossy Ware

***Groups Present:*** Rub'el

**Frequency:** 9 sherds

**Established by:** the present study

**Surface Treatment:** A glossy slip that is either identical to Petén Glossy or (more commonly) a poorly-done imitation with blurry decorations. There are discolorations present in 44.4% of the sample.

**Paste:** The paste is normally orangeish or reddish with a temper made of fine volcanic ash (44.4%), organic materials (22.2%), quartz (11.1%), calcite (11.1%), or sand (11.1%). Inclusions are present in just over ½ of the sample, and are pumice (22.2%), black (11.1%) or red (11.1%) ferruginous lumps, or pebbles (11.1%). There is a dark nucleus in 77.8% of the sample, and it is often thick.

**Form:** Plates

**Decoration:** Polychrome (44.4%), bichrome with a smudged interior (44.4%), or bichrome (11.1%).

**Observation:** This ware is composed of types that appear to be imitations of Tepeu-sphere wares, but the technology or final product are wrong. This does not include mis-fired sherds, which were not present or detectable in the sample.

Imitation Petén Glossy is defined by what it is not, so it has little internal cohesion.

**Chronological Distribution:** Jolom (Late Classic)

**Geographical Distribution:** Some of the types identified by Dillon (1979) at Salinas de los Nueve Cerros “miss” the Petén Glossy ideal in similar ways. In the present sample, the ware is found in caves in the Candelaria system and the San Francisco Hills.

### Fine Gray Ware

**Groups Present:** Chablekal

**Frequency:** 3 sherds

**Established by:** RE Smith and Gifford (1966)

**Surface Treatment:** Remnants of a black slip, but which is normally heavily-eroded.

The exposed surface is highly smoothed and fires to a light gray.

**Paste:** The paste is a light orange (5YR6/3) with very fine quartz temper, ferruginous inclusions, and a thick black nucleus.

**Form:** A flaring-walled plate

**Decoration:** Zoomorphic incisions

**Chronological Distribution:** Ru (Terminal Classic)

**Geographical Distribution:** This ware appears in the late Classic along the Pasión and Usumacinta river system and appears to have originated in the Palenque area, although it is very common in the Petexbatun and Cancuen. It is present in La Caoba Vieja in the present study.

### Imitation Fine Gray Ware

**Groups Present:** Chachab'

**Frequency:** 165 sherds

**Established by:** the present study

**Surface Treatment:** There is some evidence of an easily-eroded, dark brown slip. The exposed surface is rough and grayish or brownish.

**Paste:** The paste is soft and fine with a reddish, orangeish, or brownish color. The temper is either volcanic ash (72.7%) or sand (27.3%), and there are occasionally red (24.2%) or black (3%) ferruginous lumps or pumice (3%) inclusions. There is often a thick dark nucleus (51.5%) in the sample.

**Form:** The vessels are most commonly cups (73.3%) or tripod plates (21.2%) with 5.5% of the sample unknown.

**Decoration:** Plain (72.7%), incised (15.8%), incised and fluted (9.7%), interior smudged (1.2%), or fluted (.6%).

**Observation:** Unlike Imitation Petén Glossy, this ware is actually internally consistent and represents a well-established local adaptation of traits common further to the north.

**Chronological Distribution:** Ru (Terminal Classic)

**Geographical Distribution:** La Lima and La Caoba Vieja

#### Imitation Fine Orange Ware

**Groups Present:** K'ot

**Frequency:** 8 sherds and 1 whole vessel

**Established by:** the present study

**Surface Treatment:** An easily erodeable red slip under which the surface is slightly smoothed and has fired to a strong orange.

**Paste:** Very fragile and powdery orange paste with a fine ash (89%) or sand (11%) temper.

**Form:** Plates

**Decoration:** Plain (56%) or with “grater” incisions on the interior base (44%).

**Observation:** This ware differs from Fine Orange by the slip color (red instead of black) and the presence of visible temper.

**Chronological Distribution:** Ru (Terminal Classic)

**Geographical Distribution:** La Lima

#### Cahabon Flakey Ware

**Groups Present:** Anona, Borrayo, Chichicaste, Chipilin, Gladiola, Culantro, Coralillo, Nopal, Mozote, Raxruha, Chucho, Cardosanto, Clavel, Sechochoc, Batz, Carlota, Unknown Incised, Papur, Jelik

**Frequency:** 4,658 sherds

**Established by:** the present study

**Surface Treatment:** The slip is normally indeterminate due to erosion (67%), but the most common known color is brown (12.7%) followed by specular red (5.6%), black (4.6%), orange (3.7%), and cream (3.6%). Rare colors are white (.2%) and grey (.2%).

**Paste:** The paste is most commonly fine sand (45.3%) or fine volcanic ash (31%), although medium sand (9%), fine (3.5%) and medium (2.2%) quartz, and medium calcite (1.9%) are all occasionally present. Fine and large calcite, a mixture of volcanic ash and medium quartz or fine calcite, badly-sorted quartz and calcite, organic elements, organic elements and sand, and sand and ash are all occasionally used as tempers (each composing less than 1% of the sample).

**Form:** Due to the eroded nature of much of the sample, over half (55.8%) of the sample is of indeterminate form. Of the remaining material, bowls are the most common (21%), followed by jars (5.3%), cups (4.3%), bowls with recto-divergent rim and medial flange

(3%), cylinders (2%), open bowls (1.4%), small Z-angled bowls (1.2%), straight-walled bowls with a medial flange (1.1%), plates (1%), or a bowl with sloping walls (1%). Rarer forms are highland comales, tripod plates with sloping or flaring walls, bowls with vertical or flaring walls, squat or elongated jars, cups with sloping or flaring walls, barrels, pitchers, open bowls, round bowls, and bowls with a recto-divergant rim and a mid-sized medial flange.

***Decoration:*** A full 87.4% of the sample is undecorated or too eroded to tell, but the most common decoration technique is interior smudging (9.5%) followed by incising (1.4%). Fluting, grooving, incising and fluting, impressing, stamping, resist, bichrome, modeling, polychrome, gouging and incising, appliqué, gouging, punctating and incising, modeling and impressing, incising and impressing, and bichrome and resist are all occasionally present, each forming less than 1% of the sample.

***Observation:*** It is likely that this ware will be subdivided at a future date, but a larger sample is needed to do so.

***Chronological Distribution:*** U Chiha (Late Middle Preclassic), Yitoqil (Late Preclassic), Puj (Terminal Preclassic), Pel (Early Classic), Jolom (Late Classic), Ru (Terminal Classic), and Is (Early Postclassic)

***Geographical Distribution:*** This ware is found at all sites in the region but is most common in La Lima and the Candelaria system.

#### Lanquin Unslipped Ware

***Groups Present:*** Cebada, Chatillas, Grama, Patepa

***Frequency:*** 4,543 sherds

**Established by:** this study

**Surface Treatment:** Unslipped

**Paste:** The paste is most commonly organic (38%), followed by fine (22%) or medium (19%) sand. Fine (4.9%) or medium (3.4%) volcanic ash, small (1.5%), medium (4.5%), or large (3%) quartz tempers are all occasionally present, as is a mixture of calcite and quartz (1.5%). Very rarely the temper will be calcite.

**Form:** Due to generally poor preservation, 76.1% of the sample is of unknown form, but the most commonly identified form is a jar (22.1%). Bowls, comales, cylinders, cups, incensarios, and small Z-angled bowls each form less than 1% of the sample.

**Decoration:** All are undecorated

**Observation:** It is likely that a close examination of a larger sample will necessitate the division of this ware into several smaller ones, but for the purpose of this study, all of the highland unslipped groups have been combined into a single ware.

**Chronological Distribution:** Pel (Early Classic) and Jolom (Late Classic)

**Geographical Distribution:** It is most common in La Lima and the Candelaria system but appears in every part of the region from Hun Nal Ye to Tres Islas.

#### Acalaha Unslipped Ware

**Groups Present:** Osoquin

**Frequency:** 1138 sherds

**Established by:** the present study.

**Surface Treatment:** Normally smoothed with a speckling of pores visible on the surface. The surface is often a light orange or tan.



**Paste:** The paste contains both organic and non-organic elements, the latter of which are commonly large quartz (55%) or large (7%) or medium (6%) calcite mixed with the organics. There are occasionally ferruginous lumps (20%) or pebbles (10%) as well. A slight majority of sherds (52%) has a dark nucleus, which is nearly always thick.

**Form:** Jars (90%) and bowls (10%).

**Decoration:** Plain

**Observation:** This ware appears to be a lowland adaptation to a highland innovation—organic temper became common in Alta Verapaz in the Late Classic in the utilitarian wares, likely because it makes light-weight, porous vessels that keep stored liquids cool (Bishop, pers. comm. 2005). Here they did not completely abandon typical lowland tempers, but the end result was similar.

**Chronological Distribution:** Jolom (Late Classic)

**Geographical Distribution:** Salinas de los Nueve Cerros (Dillon 1979), Cancuen (pers. obs. 2005), and, potentially, in a cave near Aguateca (pers. obs. 2005). In the region currently under study, the type appears at La Lima, the Candelaria Cave system, La Caoba Vieja, the San Francisco Hills, and Tres Islas.

#### Xoy Glossy Ware

**Groups Present:** Jekcha

**Frequency:** 3 sherds

**Established by:** The present study.

**Surface Treatment:** A glossy slip (limited to red in the present study)

**Paste:** Soft with fine sand or medium quartz temper and a light orange or orangeish-red color.

**Form:** Jars with uneven, overly thick necks.

**Decoration:** Plain (67%) or sloppily-impressed (33%).

**Observation:** This designation is preliminary.

**Chronological Distribution:** Jolom (Late Classic)

**Geographical Distribution:** The transversal. This ware is most commonly found at Salinas de los Nueve Cerros and Cancuen (pers. obs. 2005, 2006). In the present study, it has only been identified in La Caoba Vieja and Tres Islas.

## **Bibliography**

Sabloff, Jeremy

- 1975 Excavations at Seibal, Department of Petén, Guatemala No. 2: Ceramics. Pp. 109-261. *Memoirs of the Peabody Museum of Archaeology and Ethnography*, Vol. 13. Cambridge, MA: Harvard University Press.

Smith, Robert E. and James Gifford

- 1966 1966 Maya Ceramic Varieties, Types, and Wares at Uaxactun: Supplement to "Ceramic Sequence at Uaxactun, Guatemala." *In Middle American Research Institute Publication No. 28*. Pp. 125-74. New Orleans: Tulane University.

Willey, Gordon

- 1970 The Real Xe Ceramics of Seibal, Petén, Guatemala. *In Monographs and Papers in Maya Archaeology*, vol. 61. W.R. Bullard, Jr., ed. Pp. 313-56. Cambridge: Papers of the Peabody Museum, Harvard University.